The OIL WEEKLY

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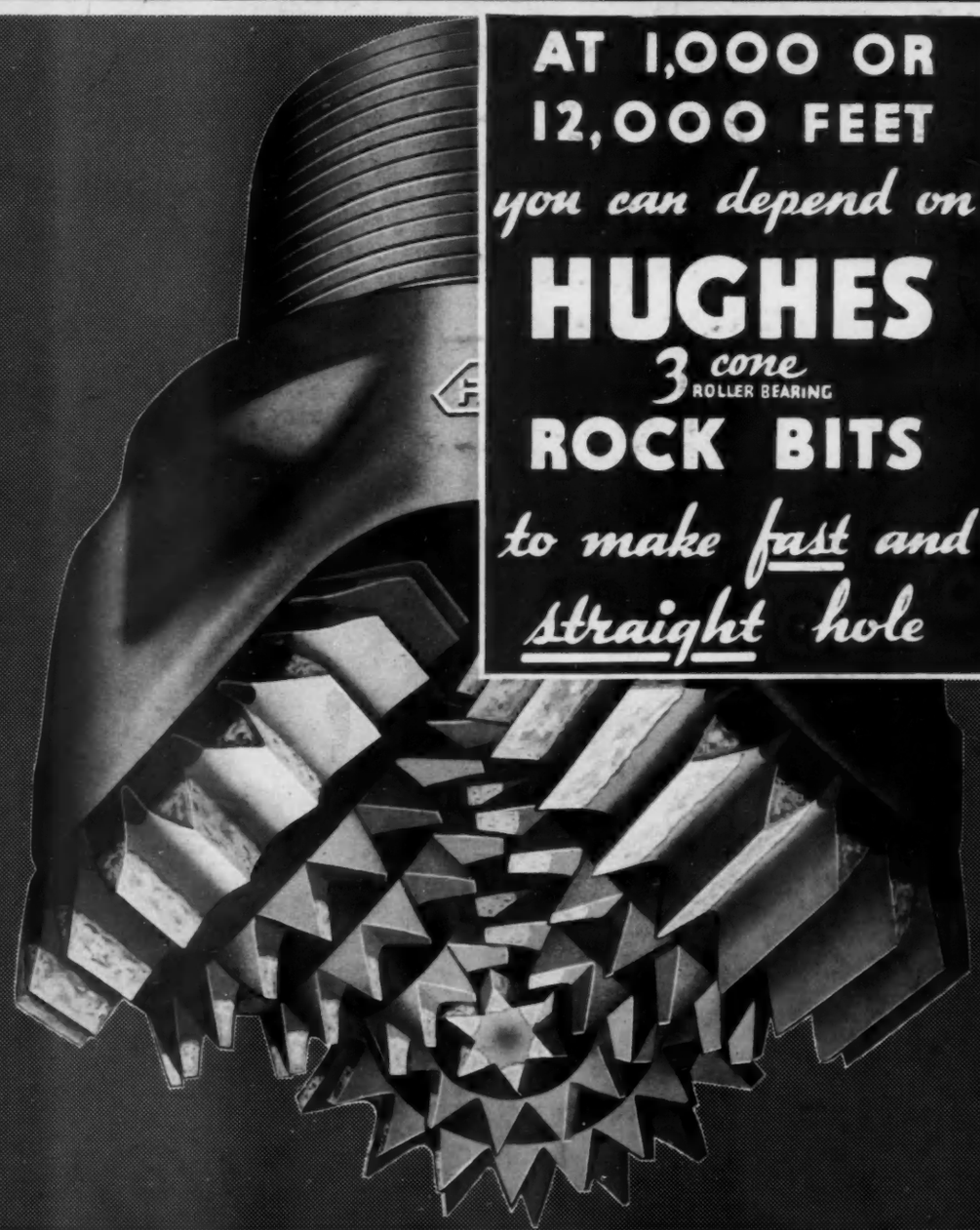

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VOLUME 27. MAY 27,

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MOVING

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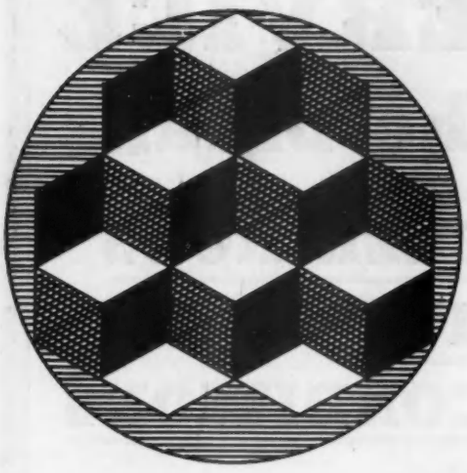
Speaking of optical illusions...



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THE OIL WEEKLY

ENGINEERING • STATISTICS • THE WEEK'S NEWS

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Contents • May 27, 1935

Volume 77 ◆ Number 11

THE CHANGING PANORAMA 7
Prospects and Politics 9
By Jack Logan

NEWS OF THE WEEK:
Commission May Require Manifests with Tenders..... 11
Ickes Criticizes West Coast Agency Agreement..... 11
Conservation Is Economic Urge States Boyd..... 12
National Scouts at Annual Meeting Plan Enlarged Activities.. 12

Production . .....41 Personals 15
Crude Prices .....43 "Squeaks" 81

PRODUCTION ENGINEERING:
Open Hole Diameter Changes Located and Measured By Recording Calipers 19
By Dr. R. C. Beckstrom
Kansas Stripper Area Economy Need Reflected by Pumping Installations 22
By C. E. Morris
Producing Experiments in Jacob Pool Solving Perplexing Problems 27
By George R. Pinkley and Earl S. Post

PIPE LINE ENGINEERING:
Dust Storms Require Compressor and Pump Equipment Protection 31
By F. B. Taylor

PIPE LINE ACTIVITY 44
FOREIGN DEVELOPMENTS 37
GENERAL FEATURES:
Gillis-English Bayou Area Interesting Geological Study..... 62
By Charles Leyendecker
Large Ranches Delay South Texas Deveolpment..... 54
By Earl S. Post

MARKETS AND STATISTICS:
General Improvement of Markets Continue..... 39
FIELD REPORTS 46
NEW EQUIPMENT 80
News of the Industry's Equipment Makers..... 78

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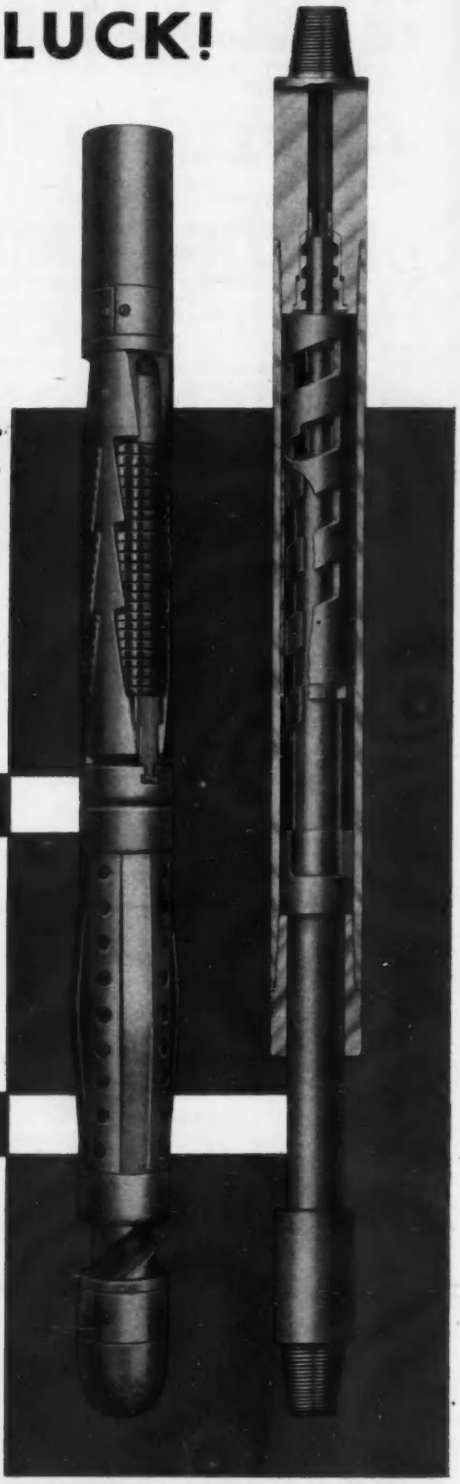

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MAY 27, 1935

THE OIL WEEKLY

FOR OIL AND GAS PRODUCTION AND
PIPE LINE DIVISIONS

ENGINEERING • NEWS • STATISTICS

The Changing Panorama

WITH the approach of the date for the expiration of the Pacific Coast Petroleum Agency, Oil Administrator Harold L. Ickes has become sharply critical of the agency, demanding prompt action on the agreements, which expire next month. Ickes also stated that a careful consideration of the supplemental agreement did not deal comprehensively with the more important operating defects detailed in his report of April 4, 1935. Page 11

THE dust storms that were so common over a large part of the Mid-Continent during the past few months has made it necessary that operators adopt precautionary moves to protect power units and other moving machinery parts. Gas pipe line companies in the Texas Panhandle found it necessary to have adequate air filtration for power units, and to install coverings over all moving machinery parts. In addition they kept greases and the like in airtight cabinets, filtered lubricating oils, and sealed the seams in buildings.

PIPE line construction work throughout the nation is on the increase. Construction will commence immediately on lines that will give several Rio Grande Valley (South Texas) fields needed outlets. Twenty-two miles of four-inch, 85 miles of six-inch, and another 85-mile line are to be built. A six-inch 28-mile oil carrier is to be built from new Crystal district of Montcalm County, Michigan. The eastern portion, if plans are completed, will receive a 165-mile six-inch gasoline line running from Carlisle to Pittsburgh, Pa. Page 44

HAVE you ever heard of 10 wildcat tests located on one structure? That is exactly what is

An approaching dust storm in the Texas Panhandle. Ten seconds after this photograph was taken day became night. Such conditions create real hazards to moving machinery parts. See page 31.

taking place in Winkler County, West Texas. The first test on the structure is 200 feet above the projected 3100-foot oil zone, but is registering high on geological markers. To date it also has shown large gas production. Gulf Production Company announced seven new locations in the territory last week, and previously had two rigs drilling.

THE economical production of oil from low-pressure, shallow sand areas in South Teaxs offers a number of perplexing problems. These are partly being solved in the Jacob field by a number of interesting experiments, including the use of small diameter tubing and unusual pumping practices, as well as the use of oil from the washing in of wells to completion.
Page 27.

THAT completions during 1935 in the East Texas field will equal, if not surpass, the 5000 operations forecasted early in the year (THE OIL WEEKLY, Feb. 25, 1935, page 29), is indicated by its recent increase in activity. During the past week 15 new wells were completed daily, while 186, or 26 per day, were started in the area.

The Oil Man's Calendar

JUNE

5-6 Eastern District, A.P.I. Division of Production, Pittsburgh, Pennsylvania.

6-7 National Petroleum Association, Fire and Safety Marshals, Oil City, Pennsylvania.

19-21 American Society of Chemical Engineers, Cincinnati, Ohio.

20-21 Pennsylvania Grade Crude Oil Association, State College, Pennsylvania.

24-28 American Society for Testing Materials, Detroit, Michigan.

AUGUST

American Petroleum Equipment Suppliers Association.

19-24 American Chemical Society, San Francisco, California.

SEPTEMBER

18-20 National Petroleum Association, Atlantic City, New Jersey.

25-27 National Petroleum Association, Atlantic City, New Jersey.

NOVEMBER

4-5 Independent Petroleum Association of America, Annual Meeting, Dallas, Texas.

11-14 American Petroleum Institute, Annual Meeting, Biltmore Hotel, Los Angeles.

THE Texas Railroad Commission has announced that the state's allowable for June will be 1,044,309 barrels daily, an increase of 13,748 barrels over the previous month. In the past few years the allowable for Texas' 520 oil fields has been raised from 700,000 barrels per day to the above figure, which represents a sizeable increase in the value of the state's oil products. Although the East Texas allowable remains at 3.4 percent of the hourly potential, new completions in the field boosted the total permissible output to 462,094 barrels. In adjusting production figures an increase was ordered in 43 fields, while 39 were reduced.

DATA obtained by the location and measurement of irregularities in the diameter of drilled holes has many useful applications. Such information may be used in determining the amount of cement to be used in cementing casing or in plugging back, in locating favorable sites for landing casings or packers, and for measuring the action of acid as well as other adaptations. Recording calipers for determining the cavings and constrictions in open holes give a complete record within a few minutes.
Page 19.

OPERATORS of stripper leases are daily confronted with the problem of keeping lifting costs as low as possible if they are to remain in business on a profitable basis. As a result they adopt many practices not considered the best by engineers. However, they are of interest and permit the small producing lease operator to lift oil very cheaply.
Page 22.

THERE have been many advancements in drilling engineering during the past year, and at present several trends are developing that may materially influence future methods and practices. Also, drilling activity throughout the world is increasing, and now is running higher than at any time since July, 1930. For these reasons THE OIL WEEKLY on June 3 will publish an issue devoted to drilling engineering and development.

The contents of this issue will include discussions on trends in equipment design and rig hook-ups, developments in drilling methods and practices, a symposium on rotary drilling muds, a symposium on well completion methods, an article bringing to date data on heaving shale drilling and an article analyzing drilling activity operations. Also included is a bibliography of drilling engineering articles published in THE OIL WEEKLY since January 1, 1934.

While most of the material has been prepared by THE OIL WEEKLY editorial staff with the assistance of petroleum engineers of prominence, authors contributing signed articles include such outstanding technical men as E. V. Foran, of Parker, Foran & Knode, consulting petroleum engineers; John F. Dodge, professor of petroleum engineering at the University of Southern California; and H. L. Edwards, Edwards Drilling Company.

It appears that more effort is being extended by engineers on the improvement of drilling operations than ever before, and THE OIL WEEKLY of June 3 will summarize these advancements in an interesting style.

Prospects and Politics . . .

The oil industry's future appears especially promising, despite political uncertainties. Thomas bill is believed sidetracked, but N.R.A. bill's prospects are obscure. With oil code on verge of expiration, the Blue Eagle appears to be regarded more sympathetically. But fearing federal control, many in the oil industry are flatly against extending or enlarging it. Federal gasoline tax removal is vigorously urged. Markets continue strong. Wildcatting is now less hazardous.

JACK LOGAN
Associate Editor

THE petroleum industry continues to have a promising outlook. Oil markets remain strong, and relatively high prices are making operations profitable in all branches of the business. High drilling volume reflects confidence in the industry that conditions will continue favorable. Popularity of oil shares in the financial markets indicates a similar attitude among the professional traders and the public.

The industry's fundamental position is strong, with demand for oils near all-time peaks, with stocks in storage lowest for eight years, and with supply from domestic and foreign fields continuing under strict control.

Some uncertainty is injected into the picture, however, by the political situation. It is not yet clear whether or not Congress will reject certain bills that are feared. Nor is it assured that Congress will enact certain other legislation generally considered desirable.

Thomas Bill Has Slim Chance

THE stoutly fought Thomas bill appears to have the prospects of a cooped-up turkey the day before Thanksgiving. Even the Senate postponed action indefinitely last week on this measure, which would permit the federal government to dominate the petroleum industry. Called up on the floor, the bill met the withering objection of both Texas Senators and was indefinitely pushed aside. In the House there has not been even committee approval, and postponement of serious consideration until next session is anticipated.

N.R.A. Bill in Controversy

THE N.R.A. extension bill, with its "public utility" threat for the oil industry, has a more obscure prospect. The House is expected to have before it this week a report of its ways and means committee recommending passage of the measure essentially as contemplated originally. In such form it would last two years and permit Presidential imposition of codes, price fixing in some instances, and control of intra-state business affecting interstate commerce. The Senate, on the other hand, is expected to insist on its recent resolution to terminate the new N.R.A. April 1, 1936, and to prohibit price fixing and regulation of intra-state business. If and when the House passes the bill contemplated for its consideration, the measure will go to a conference committee, for possible compromise of differences with the Senate resolution.

N.I.R.A. Expires June 16

"THIS order shall cease to be effective on June 16, 1935, in the event that legislation extending the effective period of the National Industrial Recovery Act is not enacted." So read a paragraph in the oil code administrator's recent order fixing gasoline production allowables for June. Almost verbatim was a paragraph in a similar order fixing crude oil production allocations to the various states for June.

These paragraphs were somewhat incisive reminders that without Congressional action on N.R.A., June 16 will bring not only cessation of federal allowables in crude oil and gasoline production but also lifting of control of imports and elimination of marketing agreements and other code sponsored conditions and practices.

Blue Eagle Still Respectable Bird

THERE has been much fretting under code regulations. But as the time draws near for the recovery act to expire, there is considerable reluctance to seeing it terminated or radically changed. On the showdown, there appears to be growing sentiment in favor of merely pulling some of the objectionable feathers from the Blue Eagle instead of cutting its head off.

Executives of major companies are more or less generally on record as wanting full and immediate termination of the recovery act, for many of the requirements are troublesome and odious, and government encroachment is feared. Yet the big companies are reluctant to give up the immunity from anti-trust laws afforded by N.R.A. Many of the independents have been ad-

versely critical of the law, but they are anxiously aware of the fact it furnishes the only existing regulation of petroleum imports from foreign fields. (The majors, not they, are the importers.) Workers throughout the industry may be assumed to have no particular objections to N.R.A., especially when its advocates are saying its elimination would reduce wages and jobs.

Code Benefits Pointed Out

THUS it may be that the Blue Eagle is not nearly as near the chopping block as some observers are saying. It may be that the oil industry generally will turn an attentive ear to such counsel as that of J. D. Collett, Texas independent operator and chairman of the oil code planning and coordination committee. Discussing the Senate's N.R.A. resolution, he said one of its sections "means that most of the crude oil producers, many refiners, and nearly all of the operators of bulk stations and filling stations would be exempted from code provisions. It means that the benefits of such production control and control of refinery allocations as have been exercised under the code will end, and that the benefits which have accrued under the code in marketing practices and stability will be lost. If this resolution should be concurred in by the House, the industry would revert to the methods in use prior to the passage of the Recovery Act . . . A code for a part of an industry is impracticable. . . . It must cover the entire industry if it is to be effective and beneficial."

If Bills Fail to Pass?

IT it obviously conjectural what the oil industry's future would be if both the new N.R.A. and the Thomas bills should fail to pass. But the big companies and many independents, in flatly opposing the bills, are gambling that the industry will fare better ultimately without the measures.

They say adequate control already is provided by state governments and the federal shipping regulations under the Connally Act. Further federal legislation should be confined, they say, to approving the interstate compact, authorizing the Bureau of Mines to recommend crude allowables of states, and controlling imports.

Reasons for Opposing Added Control

SUCH further federal legislation is not yet definitely assured, however. All is being staked, therefore, on control primarily by the states. It is true state control is more dependable than formerly. For state laws are stronger, and enforcement is better, with state authorities exerting themselves conspicuously in the fear of federal usurpation. But the unusual embracing of state control hardly seems due entirely to unquestioning faith in state regulation. The state control is embraced also because of deep and desperate fear of progressive federal government intrusion in the industry's affairs. It is embraced also, apparently, because of belief that over-production is ceasing to be a very serious menace, anyway, with flush fields declining and with relatively few new fields being discovered.

Federal Tax Removal Urged

ALONG with motorists and highway users generally, the petroleum industry is actively opposing re-enactment of the federal one-cent gasoline tax upon its expiration date, June 30, 1935. Some observers say there is not a chance for the tax to be lifted, with the government spending as it is and with the levy so profitable and easily collected. But optimists hope that the House ways and means committee will recommend removal of the tax when it considers re-enactment of the general tax measure. They also hope for sympathy from the Senate finance committee.

The hope is based on indications that members of Congress are being influenced by clamor for removal of the tax. About 300 national, state, and local organizations have lodged formal protests against re-enactment of the federal gasoline tax. Legislatures of 21 states have memorialized Congress to eliminate the tax. In addition, hundreds of individuals have written letters to their congressmen and senators personally protesting the tax and requesting its elimination. Objections against the tax are numerous, widely sung, and obviously well-founded. Even Congress must see injustice in today's state-federal gasoline tax that represents a 40 percent sales tax at the service station or a 100 percent sales tax at the refinery. But the federal government is concerned now with raising, not reducing, its revenue.

Further Market Gains

THE march of the oil markets to higher and firmer ground has continued. Service station prices of the nation last week made some further gains. Refinery prices of third grade gasoline and kerosene in the Mid-Continent were an eighth-cent higher than in the previous week, and other refined products showed improvement or firmness.

Scientific Searching for Oil

THE scientific progress that has been made in finding new oil fields was commented upon recently in the Standard Oil Company (Indiana) annual report. Figures were given to show the diminishing part chance now plays in finding oil. In 1934 the company completed 173 wholly owned wells, while there were also completed 68 additional wells in which the company had interest. Less than eight percent of the wells drilled proved to be non-productive, it was stated. Even in the drilling of wildcat wells, oil was found in more than half the attempts. The report embodied an inference of the fact that geophysics, pointing the way to promising structures, has contributed greatly to lowering the dry hole percentage.

Commission *May Require Tenders Be Accompanied by* Manifests

Austin, Texas.—Testimony of East Texas refiners before the Texas Railroad Commission Friday turned into a hot oil investigation the hearing called to consider the means of enforcing provisions of the new law requiring tenders with all oil or products transported. The hearing was the first under provisions of a new statute which allows confiscation of untendered products arrested in transit.

Three independent refiners appeared to testify concerning their reasons for operating on untendered oil and to offer suggestions for a solution to this problem. All said that they were willing to operate on tendered oil and pay the posted price, but that there was no oil available. They contended that the commission should require the major companies, who had all the connections, to allow the independents sufficient oil to maintain their plants.

Operators present were frequently startled by the bald statements of the witnesses concerning their methods of operating on excess oil. E. Holmes, owner of Acme Refinery at Gladewater, testified that he had operated on untendered oil for the past year, and that he was operating on this basis now. Assistant Attorney General W. J. Holt who attended the hearing, phoned the East Texas office of the attorney general, and had charges prepared against Holmes and arrangements made to meet the operator when he arrived by train in Gladewater Saturday.

Several charges were made that the major companies were monopolizing all the oil from the field, thus forcing the independents to operate on untendered oil or close down. Charges were also made that railroad commission investigators had stated they were instructed to check independents only, and leave the major companies alone.

Representative Charles Celaya, chairman of a legislative investigating committee authorized to look into the hot oil question, attended the hearing.

The commission, at that portion of the hearing devoted to the subject of requiring tenders, placed four employes on the stand. These witnesses explained the existing tender set-up and the necessity for a further check on the oil after the tender is first issued. They urged that the commission install a system which would require manifests with each shipment showing the tender number under which the movement of the crude was allowed. By requiring these manifests on all crude and products, a check could be had of every barrel of oil from the well to the filling station, and evasion of commission orders made more difficult. The commission is expected to issue orders shortly making these manifest one of the requirements for transporting oil or products. They must be published for three days in three newspapers, after which penalties may be imposed for violations. These penalties consist of fines ranging from $50 to $200 which may be assessed against the truck driver or transporter of the oil, and in addition, the oil itself may be confiscated through a civil action.

Ickes Criticizes West Coast Agency Agreement

Washington, D. C.—Sharply critical of the supplemental agreement submitted by the Pacific Coast Petroleum Agency as a result of defects in the original agency and refiners' agreements approved June 23, 1934, pointed out in a report issued April 4, last, Oil Administrator Harold L. Ickes on May 22 revealed that he had written the agency demanding prompt action on the agreements, which will expire next month.

In his letter, the administrator neither approved nor disapproved of the agency's action, holding that the supplemental agreement, being between "certain parties" and merely supplemental to the 1934 pacts, require no action by him.

"You indicate in your letter that the supplemental agreement is forwarded pursuant to your election to submit a program to correct certain defects in the operation of the Agency agreements to which your attention was called in the report and order approved by me on April 4, 1935," he stated.

"Careful consideration of this agreement, however, indicates that it does not set forth a program which deals comprehensively with the more important operating defects detailed in the report.

"I recognize the extreme complexity of the problems with which you must deal. Nevertheless, I still believe that as representatives of the oil industry on the West Coast you can solve these problems if you will but recognize the necessity of their solution.

"In view of your continuing negotiations it is apparent that you may not have had sufficient time to devise and agree upon your program. Accordingly, I am willing to accept your communication as an evidence of good faith and to construe it in its most favorable light as evidence of the necessity for further time in which to work out a common course of constructive action.

"In thus construing your communication, I would not have you believe that the call for corrective action as embodied in the report of April 4, 1935, was lightly made. The future welfare of both the public and the oil industry requires that I reiterate my request for such corrective action. You have not met nor dealt with the wasteful practice of secondary marketing nor with the decreasing sales to the trade of the refiner group, nor with other grave defects which have been brought to your notice. Moreover, the general welfare of the public of which the oil industry is a part imperatively requires that I call to your attention the recent unexplained rise in the retail price of gasoline above the admittedly profitable levels which have prevailed in your territory throughout almost the entire period during which these agreements have operated.

"The imminent approach of the expiration date of the Agency agreements renders time of the essence. Any application for a renewal or extension of these agreements must necessarily embody a consideration of these objections and a determination of methods for their correction."

Fahy Urges Two Year Continuance of Code

Washington, D. C.—Continuance of the recovery act for two years in a form capable of obtaining its objectives was Friday urged upon the House Ways and Means Committee by Charles Fahy, chairman of the Petroleum Administrative Board. Fahy explained he was urging continuance of the law on the basis of the industrial and industry benefits which have been derived during the past two years.

Pointing out that the oil code provides a method for balancing supply to demand, he recommended amendment of the House committee draft of the bill to provide specifically that the President, when he finds it necessary, may order regulation of production.

Texas Gas Hearing To Be Held June 14

Austin, Texas. — Official notice of a statewide hearing to consider gas proration in Texas has been issued by the Texas Railroad Commission. The hearing has been set for June 14 at Amarillo.

At the general proration hearing held in Austin on May 16, this portion of the hearing was recessed, but the new notice was issued to care for possible legal flaws in the other method of procedure.

Conservation Is *Not Legal Compulsion But* Economic Urge

—*States* W. R. BOYD, Jr.

Dallas, Texas.—Attempts to enact unnecessary federal legislation designed rigidly to control the petroleum industry were cited by W. R. Boyd, Jr., executive vice president of the American Petroleum Institute, speaking here May 22 before the Dallas Junior Chamber of Commerce, as typical of efforts to interfere with business, to usurp states' rights, and to set up a new social and economic system in this country.

Government has a duty to the public and an obligation to the petroleum industry in promoting the conservation of the nation's petroleum resources, he said, but theorists in government appear to be determined to make conservation an excuse for governmental control, just as they are trying to make federal public works and relief projects excuses for subordinating the powers of the states to those of Washington.

Mr. Boyd said there was a time when ignorance of the extent of national petroleum resources justified fears for their supposedly approaching exhaustion, but asserted that time definitely has passed. He said the petroleum industry has made miraculous progress in prolonging the productive life of oil fields, increasing the amount of oil recovered from any given pool, finding new sources of supply, rejuvenating old fields, reducing production wastes, and in obtaining oil from lower depths. Explaining that within comparatively a few years the amount of gasoline obtained from a barrel of crude oil has been doubled, he said that short of 100 percent there is virtually no limit to the proportion of gasoline and other refined products which modern methods and equipment can extract both from crude oil and its substitutes.

"The combined result of these practical efforts at conservation has been enormously to expand our petroleum reserves, whatever they may be, and to postpone by generations the danger of depletion," said Mr. Boyd. "They serve also to place in the category of political platitudes many of the current fulminations against alleged waste and approaching exhaustion of the nation's oil supply. Progress made toward successful conservation has been due largely to economic urge rather than to legal compulsion."

The executive vice president of the petroleum industry's largest trade association expressed the opinion that repeated threats of rigid federal control and of making the industry a public utility have tended to unsettle confidence in the economic policies of the federal government, while legislative uncertainties, threats and interferences have handicapped business and retarded progress.

"It is only natural that some of us," he added, "should regard such threats as indicative of a purpose eventually to bring about the complete socialization or nationalization of this and of other important industries."

Mr. Boyd outlined a petition recently presented to Congress by the Institute. Its major requests were for minimum governmental regulation, federal encouragement of the states in exercising their powers to regulate the production of crude oil and natural gas and rigid enforcement of the Connally "hot oil" law. The petition appealed also for federal approval of interstate conservation compacts, use of the U. S. Bureau of Mines as a fact-finding agency to ascertain the

(*Continued on page 45*)

National Scouts *at Annual Meeting Make Plans* Enlarge Activities

Corpus Christi, Texas.—Plans for material expansion of the scope of the National Oil Scouts Association of America, Inc., and to increase its membership were outlined at the twelfth annual convention held here May 20 and 21. The center of the organization's activity has been heretofore centered around Texas with a limited number from adjoining states participating in the affairs.

The executive committee, elected at the meeting, was impowered to re-write the by-laws of the organization, to employ a manager for the association's year book, and to generally outline and put into force a program to encourage membership among all oil producing states of the country.

One of the outstanding features will be the enlargement of the year book to include all the Mid-Continent fields. The book in 1936 will cover histories of the various fields of the entire sector, including Kansas, Oklahoma, Arkansas, Louisiana, New Mexico and Texas. It also will involve such other data of interest to the oil fraternity in this zone.

Along this line, efforts will be made to at least double the membership in the association through the attraction of members from the new areas included in the year book. Under present plans, membership fees will remain $5.00 with a year book being given complimentary to each member.

The following officers were elected for the new year: Jesse L. Bullard, Shell Petroleum Corporation, San Antonio, president; Joe Haygood, Humble Oil & Refining Company, Midland, first vice president; C. O. Falk, Humble Oil & Refining

(*Continued on page 45*)

New officers of the Oil Scouts Association of America, Inc., are; left to right, standing: Jesse L. Bullard, Shell Petroleum Corporation, San Antonio; Joe Haygood, Humble Oil & Refining Company, Midland, first vice president. Seated: Dwight L. Becker, Amerada Petroleum Corpration, Houston, chairman executive committee; C. O. Falk, Humble Oil & Refining Company, San Antonio, second vice president; and Howard Boyd, Magnolia Petroleum Company, Dallas, secretary-treasurer.

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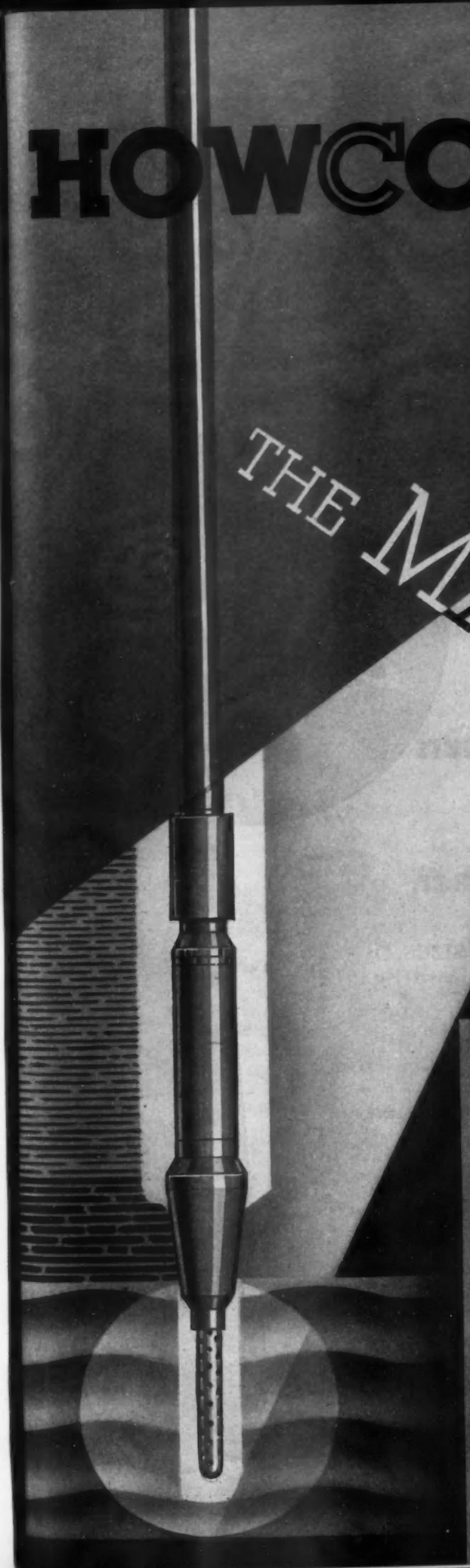

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MEN IN THE INDUSTRY'S NEWS

BERKLEY WILLIAMS, postmaster of Richmond, Va., has been elected president of the Derby Oil Company of Wichita, Kansas, to succeed A. L. Derby, resigned, who will serve as chairman of the board of directors. Mr. Williams has been a stockholder in the company for many years and is prominently known in the investment banking circles of Virginia. Other members re-elected to the board at the recent meeting of stockholders were as follows: C. G. Yankey, general counsel, Wichita; L. C. Kelly, Fourth National Bank, Wichita; S. P. Wallingford, grain dealer, Wichita; Austin F. Barry, capitalist, New York; and L. Z. Morris Strauss, investment banker, New York. E. C. Moriarty and A. S. Ritchie, vice presidents, will be in charge of operations of the company.

JOHN R. BURKE, head of the land department in Kansas and Oklahoma for Atlantic Oil Producing Company, has gone to the Gulf Coast area for 30 days rest on account of poor health. He will be temporarily succeeded by E. L. Fritz, head of the gas department in the same division.

M. A. RUTIS, drilling contractor and independent producer in North Texas since 1919, has been appointed Kansas-Oklahoma representative for Rector Well Equipment, Incorporated, of Ft. Worth and has opened district headquarters at 310 Thompson Building, Tulsa.

JOHN RIISE, president of Riise Engineering Company, Columbiana, Ohio, is convalescing at Medical-Professional Hospital, Corpus Christi, Texas, after being dangerously ill from pneumonia said to have been caused by the inhalation of dust during the great Southwestern dust storms of early April. His attack followed his visit to the Oil Equipment and Engineering Exposition at Houston.

PHILIP ANDREWS, geologist for Gulf Oil Company in Eastern Venezuela was married in Barbados on March 26 to Miss Sally Champion of San Diego, California. After a honeymoon spent in the West Indies, the couple are now residing in Ciudad Bolivar, Venezuela.

J. H. BRODERICK, president, and J. Weaver Smith, vice president, of The Broderick Company of Muncie, Indiana, spent a portion of the week in Tulsa in a general tour of oil fields of the Mid-Continent area.

WILLIAM W. BLAND, 59 associated with Humble Oil & Refining Company since its organization, died in Houston May 23. Mr. Bland was associated with Bonner Oil Company for 14 years prior to its purchase by Humble Oil & Refining Company, and was well known in Gulf Coast oil circles.

W. E. (STEVE) DUNLAP, petroleum engineer, for a number of years connected with various companies in California, has joined the sales department of Colmonoy, Inc., Los Nietos, Calif., and will give his attention to business in California. Mr. Dunlap was with General Petroleum Corporation for several years.

L. A. OGDEN, chief engineer in the southwestern division of Pure Oil Company, was elected the new chairman of the Mid-Continent Section, American Institute of Mining and Metallurgical Engineers at its annual meeting held in Tulsa on Monday evening, May 20. He succeeds L. L. Foley, Marathon Oil Company engineer and geologist. M. L. Terry, production engineer for The Texas Company, is first vice chairman; R. T. McNally, production engineer for Shell Petroleum Corporation, is second vice chairman; and C. C. Robbins, Carter Oil Company, is secretary-treasurer. New members of the executive committee are: Frank O. Pryor, president of Stanolind Oil & Gas Company; P. H. Bohart, vice president of Gypsy Oil Company; and R. T. Lyons, vice president of Skelly Oil Company.

L. A. OGDEN

K. M. FAGIN, production engineer for several years in East Texas, has joined the engineering department of Magnolia Petroleum Company, and will be located at Dallas.

ERNEST L. WILSON, superintendent of the land and scouting department of Simms Oil Company, Dallas, was a business visitor in New York City the past week.

D. A. HULCY, former assistant to the president of Lone Star Gas Company, Dallas, has been elected vice president and member of the board of directors, filling the vacancy caused by the recent death of Karl F. Griffith.

ERNEST SIDWELL has resigned as superintendent of production for Sinclair-Wyoming Oil Company, at Casper, and has come to Tulsa to be general superintendent of production for Norbla Oil Company.

HARVEY SUTTON SMITH, well known independent oil operator, Houston, died May 22 in a local hospital. With the exception of a few years in the army, he spent his entire business life in the oil industry, starting as an office boy for Higgins Oil & Fuel Company. Later he became secretary and treasurer of Guydon & Moore Oil Company, Galveston, and later was located at Fort Worth. Mr. Smith came to Houston when he was selected sales manager of Houston Oil Company of Texas, from which organization he resigned in 1928 to become an independent operator. He was interested in development of the Esperson field in Liberty County, Beck field in Victoria County and the Pierce Junction field of Harris County.

R. L. BATTS, former judge of the United States circuit court, and for some time chairman of the Board of Regents of the University of Texas, died May 19 at Austin. He was 70 years old, and during the most active period of his life was connected in various ways with the oil industry. He was general counsel for Gulf Oil Corporation from 1919 to 1923, residing in Pittsburgh and New York City while serving the Mellon interests. As chairman of the Board of Regents of the University of Texas, Judge Batts gave considerable time to university lands that yield oil and gas. He is survived by his widow, two daughters, and a son.

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Endless Highflex Belt on a band wheel in the Pennsylvania field.

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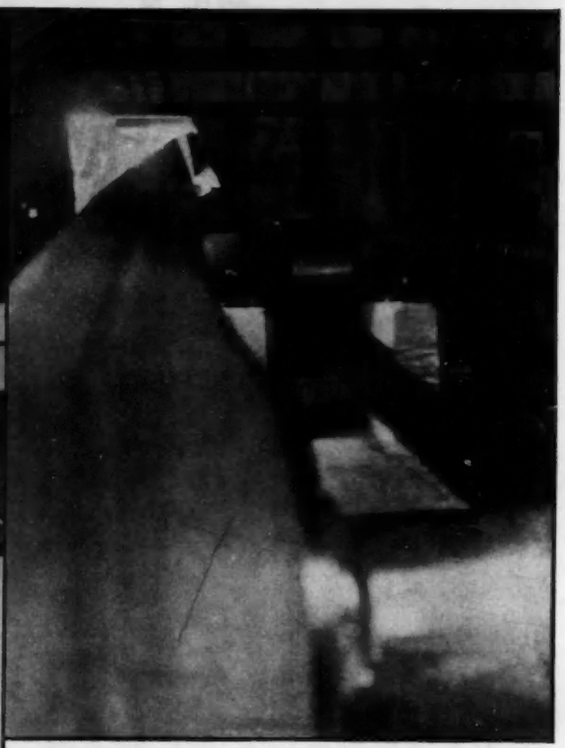

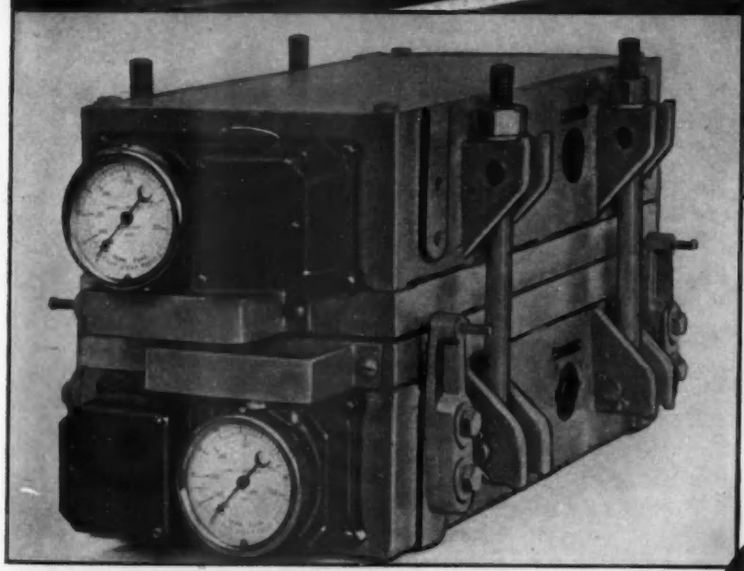

ABOVE—*Highflex on a band power and a jack shaft—reducing belt cost and shut-down time on both.*

●

TOP, LEFT—*One of the simple steps in making the Plylock Splice. Any mechanic can learn in a couple of hours how to make belts endless by this new, improved method*

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LEFT—*Portable vulcanizer used in making Highflex Belts endless by the Plylock method.*

Highflex Belting

PLYLOCK BELT JOINT

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Dear Jim:-
Nice work you and the other diggers did on that #1 Morrell getting that hole down in 28 days was really making hole
Bob S

Congratulations FROM the MAIN OFFICE

How they did it:—

IN EVERY HARD FORMATION THEY USED

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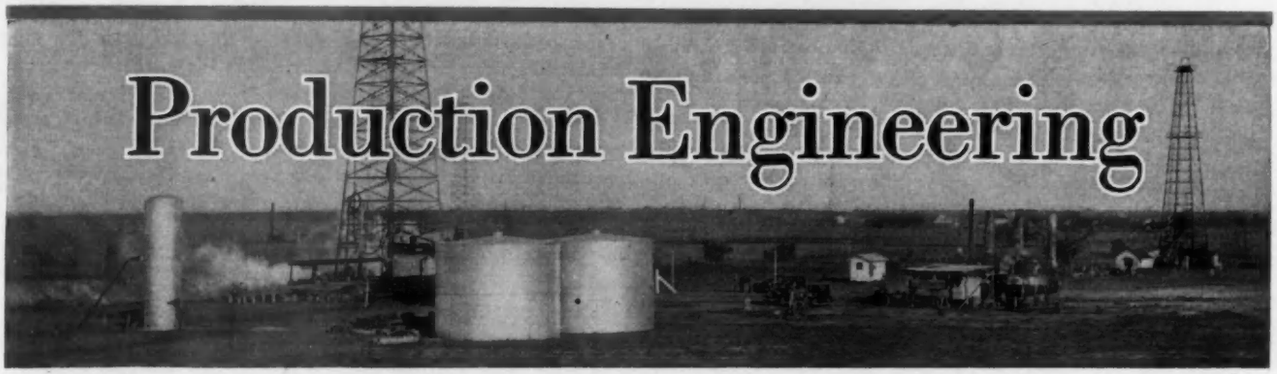


Open Hole Diameter

Changes Located and Measured by Recording Calipers

DR. R. C. BECKSTROM

AN accurate location and measurement of cavities and constrictions of oil wells is made possible by a survey of the open hole with recording calipers. They determine the amount of cement to be used in cementing casing or plugging wells. They locate favorable locations for setting casing or packers. They measure the extent of any caving in salt formations due to the solvent action of water or the action of acid in the enlargement of the hole. The calipers can be used to check the effectiveness of the various methods now used to control heaving shales. Shales that cave readily can be definitely logged and the extent of caving determined.

The present trend of production is for lighter oils. In the Coastal region this calls for deeper drilling, which must pass through the troublesome heaving shales formation. It is necessary that the best information is available to successfully pass through these formations with their tendency to cave and slip. Checks must be made to know the effect of the various methods used so that any change in the drilling program can be made before reaching these shales.

The trouble making shales lie in the lower Oligocene and the Eocene, however, they may be found elsewhere. In the other formations their presence has not given the drillers or producers the customary worries as conditions may have been favorable to their remaining in place.

These shales may be classified as those that break readily, yet wet easily and have a tendency to slip, as the water lessens its power of adhesion. They either settle in the circulating fluid or pass up with the ascending mud column. This shale is resistant to washing, but when streaked with bentonite sluffs off, as the bentonite is forced out by its own swelling. These masses of clay fall to the bottom of the hole and freeze the drill pipe.

The sticky shales have greater amounts of bentonite mixed with them. When wet they combine with the more compact shales making an extremely sticky mass that causes "balling" of the bit. This acts as a swab and plasters

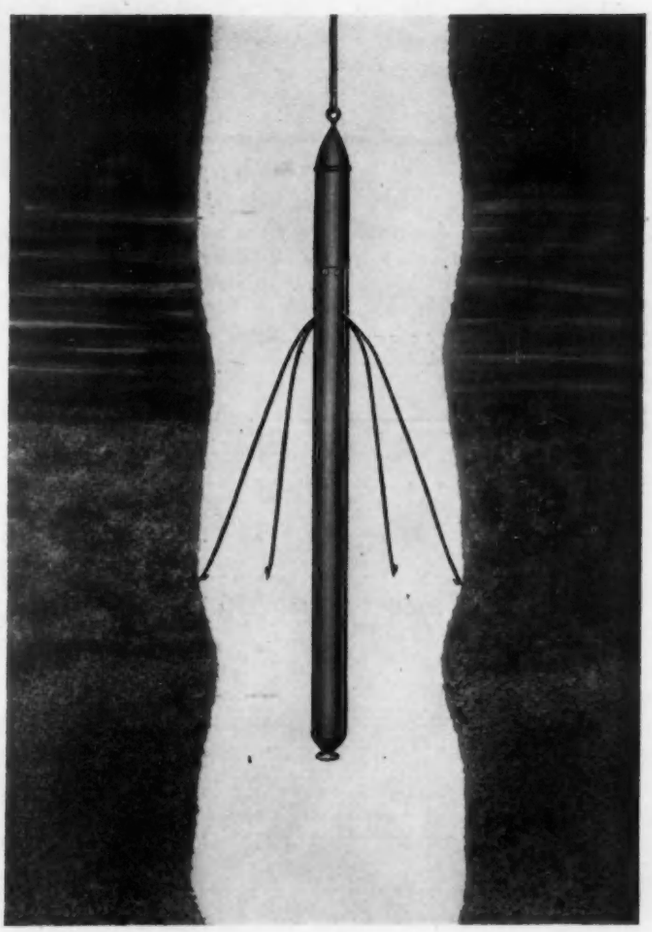


FIGURE 1
The calipers has its arms locked in the casing as it is lowered in the hole and are released as it reaches the zone to be surveyed.

the sides of the hole causing constrictions which makes the withdrawal of the tools difficult or impossible.

The bentonite that gives the greater part of the trouble is a clay like material that differs in composition in the various localities. It varies in color from a light buff to blue, is very fine grained and has pronounced colloidal properties. It absorbs as high as three times its own weight of water and may expand from six to eight times its own volume. The wetted clay becomes exceedingly smooth, soft and slippery.

The bentonite clays have a strong affinity for water and as the pressures in the producing sands are lowered the water permeates into the clay. This results in high osmotic pressures which forces the swelling shales along the line of least resistance into the open hole. The fact that the shale lies on an angle is a contributing factor to the movement into the hole.

Many methods are being tried to control caving as the use of oils or emulsions, chemicals to retard swelling or keep the salts from going into solution, increased drilling pressures, viscous and heavy mud, cementing and mechanical aids. Each or all give favorable results under certain conditions. A survey of the open hole by calipers check the result of the protective methods used. The record of the location and extent of caving is used to determine the casing and cementing program in finishing the well.

The measurement of the two diameters of the hole furnishes data to calculate the amount of cement necessary to fill the entire space around the casing. Where large portions of the hole have caved the calipers insure the proper amount of cement to fill the cavity to the required height. Figure 2 shows the two diameters of 41 feet of shot hole to be plugged. The exact amount of cement necessary to fill it is easily calculated from the recorded data. The calipers define the extent of cavities formed in the salt formations due to the solvent action of the water or the result of acid on the enlargement of the hole. In districts where shooting is used to bring in or increase production, the extent of the cavity formed can be measured.

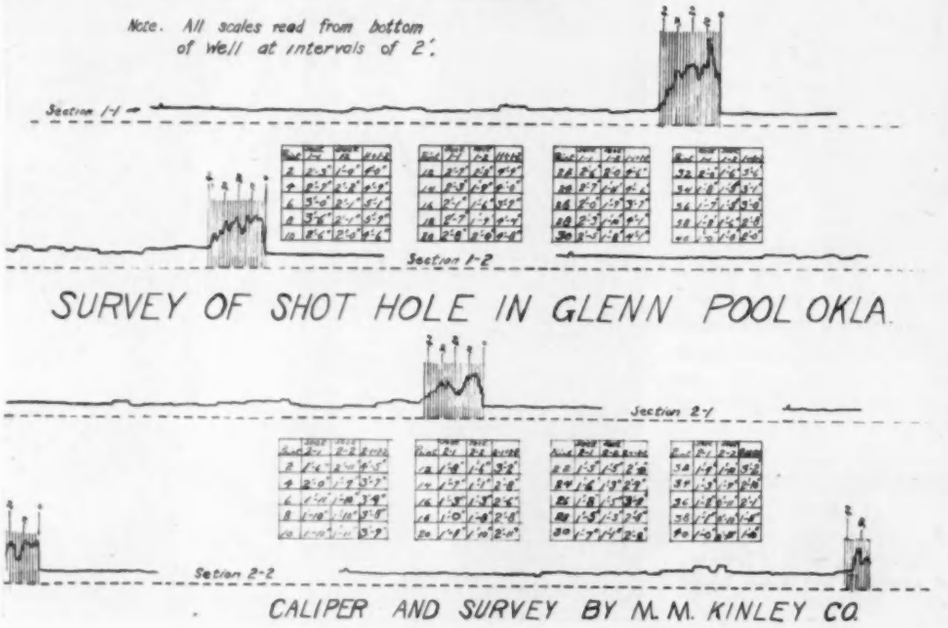
The calipers (Figure 1) have four expanding arms each having a radius of four feet two and one half inches. The instrument is nine feet over all, the lower six feet consists of a five-inch pipe in which the four arms are locked as it passes down the hole. The upper part holds the recording instruments which are enclosed and protected by a liquid and gas proof case.

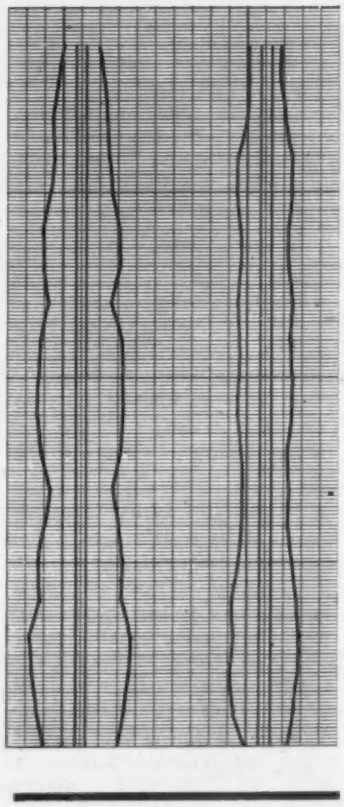
The arms operate a ratchet which raises and lowers the recording stylus against a chart on the cylinder. Each arm registers its own radius. By this means it is possible to determine the extent and position of the cavity. A ball bearing swivel prevents the instrument from spinning in the hole as each arm is held against the side of the walls of the hole by strong springs. This keeps the calipers oriented as it is raised in the hole.

The calipers are raised and lowered by a wire line, which passes through a measuring device giving the exact depth of all the readings on the chart. The recording mechanism is driven by a clock which moves the chart at a uniform speed. The instrument is raised at a known speed and stopped at stated intervals so that the record on the chart may be recorded in terms of diameters at known depths.

The calipers have a definite place in obtaining information for drilling both wildcat and known formations. Its simplicity, ease in handling and clearness of the record makes it valuable to those drilling wells. The record is easy to understand. The measurements definite and the location of irregularities of the hole are accurate. The complete record is available for immediate use as all measurements are made within a few minutes after its removal from the well.

FIGURE 2
Shot hole 41 feet in length.
Shot hole drawn to scale from measurements recorded by the calipers. Section 1-1 and 1-2 gives one diameter and Section 2-1 and 2-2 a diameter at right angles to it.


Note. All scales read from bottom of well at intervals of 2'.
Section 1-1
Section 1-2
SURVEY OF SHOT HOLE IN GLENN POOL OKLA.
Section 2-1
Section 2-2
CALIPER AND SURVEY BY M. M. KINLEY CO.



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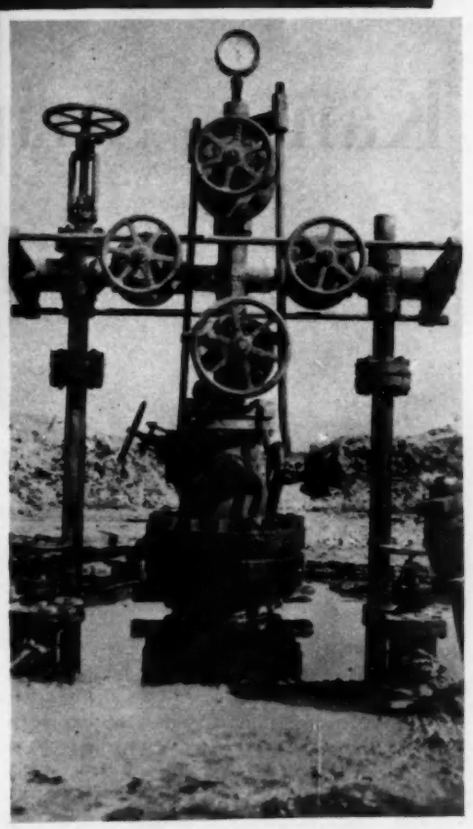

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you get Christmas Trees conceived in their entirety; resulting in the elimination of weak points that endanger the well and make valueless the investment in other parts regardless of their quality . . . Christmas Trees that are designed to work in a coordinated system of control for the entire sequence of operations from drilling-in to pumping.

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Jack frame of three-quarter-inch pull rods mounted on concrete foundation.

Kansas Stripper Area *Economy Need Reflected by* Pumping Installations

C. E. MORRIS
Air and Gas Well Tester
The Texas Company

IN the Northeastern Kansas stripper areas, where the history of past oil development has been active only when the price of oil has been at its best, economy is the major item of interest to producers. The cry is to get more oil, somehow, but get it without increased costs. The majority of the stripper oil wells are kept alive by application of artificial methods of recovery. Naturally, the lifting cost is appreciably high due to this added expense. But a fairly thick body of saturated sand, averaging about 16 percent porosity, makes for a large total ultimate recovery. On an average it has been found that at least three times as much oil can be recovered by artificial methods as would have been recovered by only the natural method of pumping. In other words, if 5000 barrels has been recovered ultimately by pumping, for each barrel already thus recovered it is fairly safe to estimate that two more barrels can yet be recovered by artificial methods.

With this information at hand, and considering the added lifting cost of operations, it is imperative that all possible economy be practiced if the investors are recognized periodically with an anticipated rate of dividends.

One of the outstanding examples of economy is practiced in the use of rod line equipment and oil well pumping jacks. Concrete jack blocks for foundation are far the most economical, as no further replacement is necessary during the life of the well. Such jack blocks have been designed and made by the various operators on the ground where used. A number of different designs are necessary to meet the requirements of different pump jack patterns. For such patterns of pump jacks as bolt on to the casing head and take their principal strain of motion from the casing head, it is not always necessary to put in a cement foundation block. Instead, two two-inch stakes made of regular line pipe, driven into the ground, are all that is used. This works fairly well where the ground is solid. When the ground is too soft, concrete blocks with sufficient weight to keep the jack solidly in position and aligned with the well is used. It is best to use concrete foundation on all jacks to eliminate further repairs and realignment. When strain on jack becomes one sided, leaks below the casing head develop when bolted to the casing head, causing leaks and loss of casing head gas necessary for lease operations. Drive pipe also very often allows the casing to rock from the strain of the jack. This causes unnecessary expense which is practically eliminated by use of concrete foundations.

On certain jack patterns where heretofore it has been customary to build a wood frame, the necessary repairs and replacements have proved to be too expensive an item. A much

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15,700 lbs. API Capacity Walking Beam.
Removable Arc Type Horsehead.
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Main Skids extended to receive mounting of Prime Mover.
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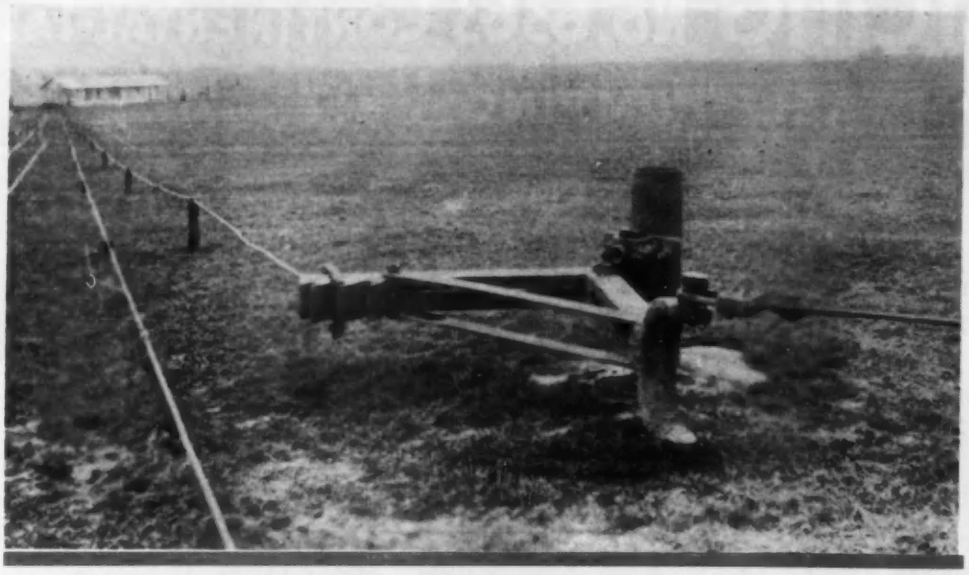

Rod line swing made from lease material.

more economical and durable frame is built by simply using up some of the lease junk and applying a small amount of "oil field" blacksmithing. One method used is to take old ¾-inch or ⅞-inch broken pull rods and by cutting them off to the right length for legs and braces, insert an eye in either end and bolt them to the jack and foundation. A sufficiently strong and sturdy jack frame is thus set up that will outlast the life of most any well.

Another method for heavier wells is two-inch pipe used in the same manner for jack legs and braces in place of wood. The two-inch pipe is flattened on the ends at the base and fastened to bolts set in foundation block. The upper ends of the legs are screwed together with a two-inch nipple for the beam to rock on and two two-inch ells. If braces are needed they are made up of junk two-inch pipe and securely bolted to the legs. The economy in these features over wood is nearly double. The initial cost is less and much more durable over a longer period of time.

A similar economical principle is adopted for rod line swings and rod line turntables. In order to skin the number of pumping powers down to the bone, several leases are very customarily pumped from one power by running a double rod line with multipliers if necessary, to a turntable on adjoining leases. Such a turntable is more often constructed of an old junk fly wheel rotating on a junk shaft set in concrete. Holes are welded in fly wheel rim and pins bolted in, sufficient in length to carry two power connections on each side of wheel if needed. This permits a large number of wells to operate on the turntable and eliminates the necessity of at least one or more powers.

The initial costs of such equipment are light, and is about the only practical method for these shallow stripper wells to keep them on a commercial basis, which average as a whole less than a barrel a day each. In a similar manner many other original and economical ideas are born and applied in the stripper areas, and are the principal nucleus around which makes it possible to continue the profitable operation of these shallow fields year after year. When we stop to remember that this area represents the initial discovery and development of the Mid-Continent oil field, which started only a few years after the Drake well of 1859, we get some idea of the present age of the older wells. Another reason for this continued production is the several different producing horizons found at different depths, some of which are more or less recent discoveries.

By thus considering expense along such lines on all equipment over production, with all practical economy oil can be and is lifted for as low as 14 cents per barrel.

Old flywheel used as Rod Line turntable.

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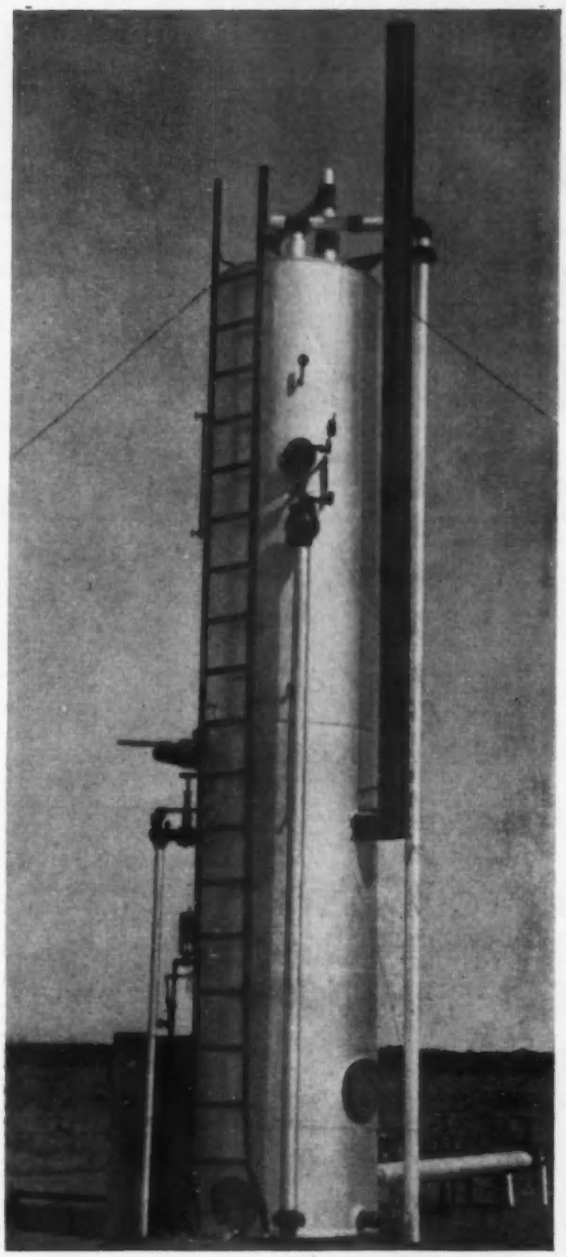

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1. A complete unit, designed by engineers assisted by practical production men.
2. Separates oil, gas and water.
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4. Compact . . . No space wasted . . . Fool-proof . . . Inexpensive to operate.
5. Simple construction. Practical. No elaborate or expensive parts to get out of order.
6. Automatic oil and water float controlled balance valves. Tight seats. Thoroughly tested.
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Some interesting and valuable work is being done in the field, including washing in with oil, use of small diameter tubing and unusual pumping practices.

Producing Experiments *in Jacob Pool Are* Solving Perplexing Problems

GEORGE R. PINKLEY *and* **EARL S. POST**
Geologist *Staff Representative*

PRODUCING oil from the low-pressure, shallow sand areas of South Texas is offering a number of perplexing problems, which are being partly solved through a series of experiments now under way. One of the most outstanding experimental grounds is the Jacob field in the northern portion of Live Oak and McMullen counties, seven miles west of Whitsett. This area has 45 producing oil wells on approximately 1000 proved acres.

Drilling methods are not out of the ordinary, but completion and production of these wells vary materially to suit local situations. The field, like many other areas along the Jackson trend, has a spotted sand condition, which is the major factor in studying a production program.

Two methods of drilling and completion have been employed. One is a rotary job to completion, while the second is to drill to casing seat and set pipe with rotary, then to drill into the producing horizon with an earth auger on a spudding machine.

The method of drilling in with a rotary brings about several difficulties. In some cases, the sand is cored before the pipe is set, but in most instances, the well is cored to the top of the shell bed immediately overlying the producing horizon, where the casing is set. In coring the sand before setting of casing, mud and drilling fluid is pushed into the low-pressure sand and shale. The result is that the sand becomes muddy or the shale melts and "muds-up" while waiting for cement to set. Upon completion, it is then necessary to do considerable swabbing to bring about flow and clean the hole. Sometimes, the walls are broken down, causing future production difficulties.

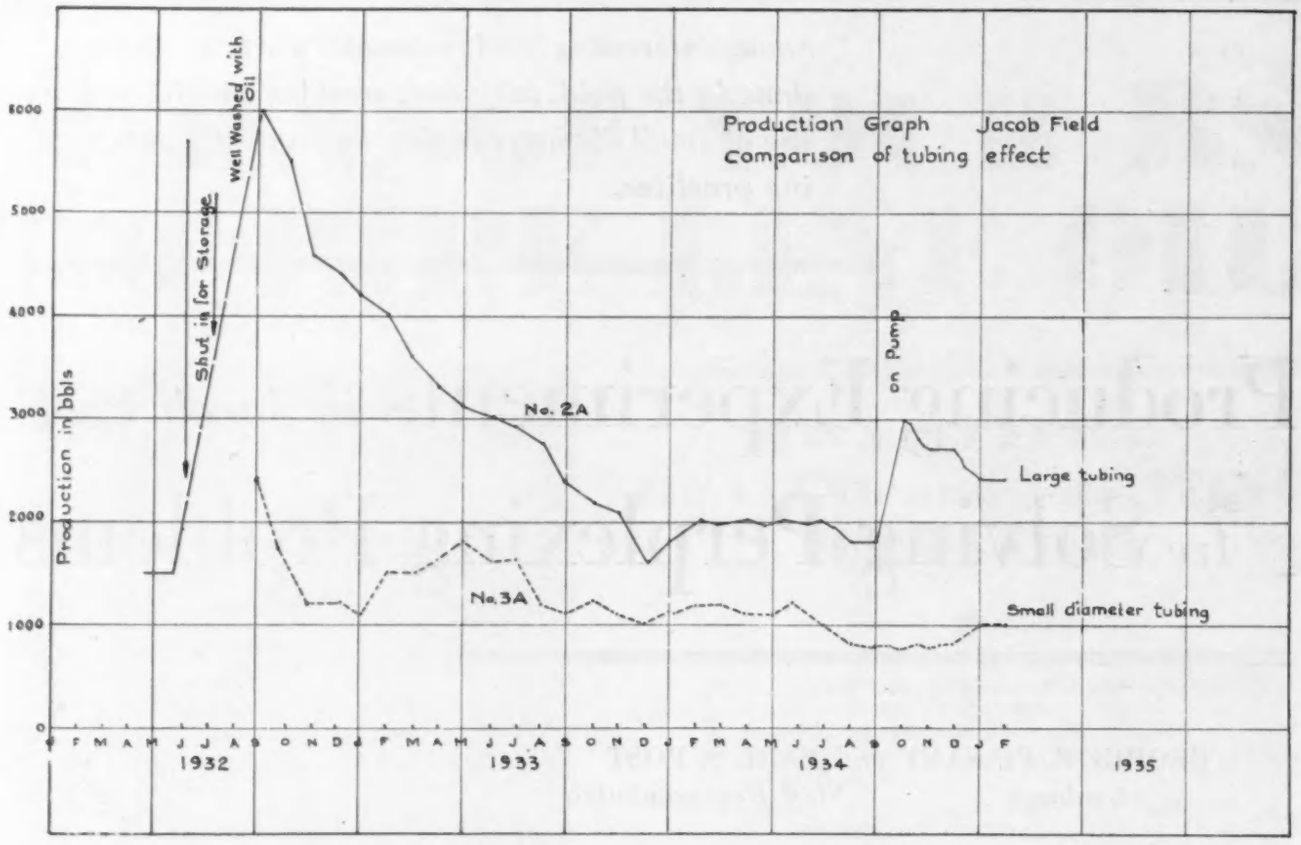
An earth auger, on the other hand, brings about a quicker and more satisfactory completion where the sands are heavily lensed with shale. After drilling out plugs, it is possible to go into the producing horizon dry and test as hole is made. The hole, as a result, stands up and after liner is run, generally maintains a steady production.

Both in completion and after wells are on production, considerable difficulty is experienced with heaving of shale and floating of sand. In an effort to overcome this situation, slotted liners have been set in many of the wells. Two types of slotted liners are used. One is made by burning holes ¼-inch by three inches with a torch. These liners are not too successful, in as much as friction caused by their rough edges tend to bring about shaling of the slots. The better type is machine cut with an outside opening of about ⅛-inch by three inches, tapering to about ¼-inch on the inside. The result is that the taper allows the shale to be pushed through the small slot into the larger opening with less pressure, thus keeping the slots cleaner. In the portions of the field where solid sand is encountered perforated liners are successful.

Small Diameter Tubing

It is frequently necessary to pull these wells and clean out the sand and shale that has come into the hole through the openings in the liner. While producing, a little of this formation material frequently becomes mixed with the oil and is brought out through the tubing. This is a rather disturbing situation to wells on pump, cutting cups and clogging the tubing. In an effort to overcome this problem, two strings of tubing are used. One is regular two-inch with steel working barrel on bottom. A string of one-inch tubing is used on the inside in place of rods and the pumping set-up is reversed so as to pump through the rods. As a result, the sand, shale and mud is pushed through the one-inch tubing and into the tanks, where it is removed. The wells generally are pumped about 100 feet off bottom, the pressure of the fluid at this level holding the formation in place.

It is highly desirable to keep the walls of the producing horizon as secure as possible. While some caving will cut



down materially on the future mudding of the well, an excessive amount of casing will cause the seat on the casing to give away, allowing upper water to come in. A water stratum with considerable pressure lies just a few feet above the casing seat atop the producing sand.

Small diameter tubing also has been used with a degree of success, the accompanying graph shows the stable manner in which the Loma Oil Company's Jacob 3-A has produced through this method. The small tubing tends to reduce the gas/oil ratio, maintain pressure and lower friction on the walls, all of which prolong the flowing life of the well. The oil is 20.6 gravity and has a high viscosity, reducing the ease of flowing naturally.

Washing In With Oil

Same company's Jacob 2-A, discovery well, is an example of the value of washing with oil as a method of production. The well was completed for 42-barrel initial flow and after several weeks production, it was shut in for additional storage. Before resuming production, the well was washed by circulating oil for 48 hours, the result that it was increased to about 250 barrels per day. The well showed a favorable decline, flowing through two-inch tubing for 2½ years, at which time it was put on pump and has been producing in that manner ever since. The recovery is in excess of 105,000 barrels to date and it is still making around 80 barrels per day, far in excess of any well in the field. Completion through careful washing with oil likely has been responsible for a large portion of this recovery. Jacob 3-A was not washed with oil.

Flow valves have been used in several instances with a fair degree of success. The low gas volume and lack of pressure in the well in which flow valves were installed did not give this method of production adequate trial. The wells using this method of production are flowing with a 60-pound closed in pressure on the casing. About 35 feet of fluid is allowed to stand in the hole, making a pressure on the formation of approximately 100 pounds. The wells flow better at a slightly higher pressure. The ratio of gas is rather low, although the majority of gas consumed must be injected from an outside source, thus increasing lifting costs. The performance is satisfactory, but the cost for the above reason has been a little high.

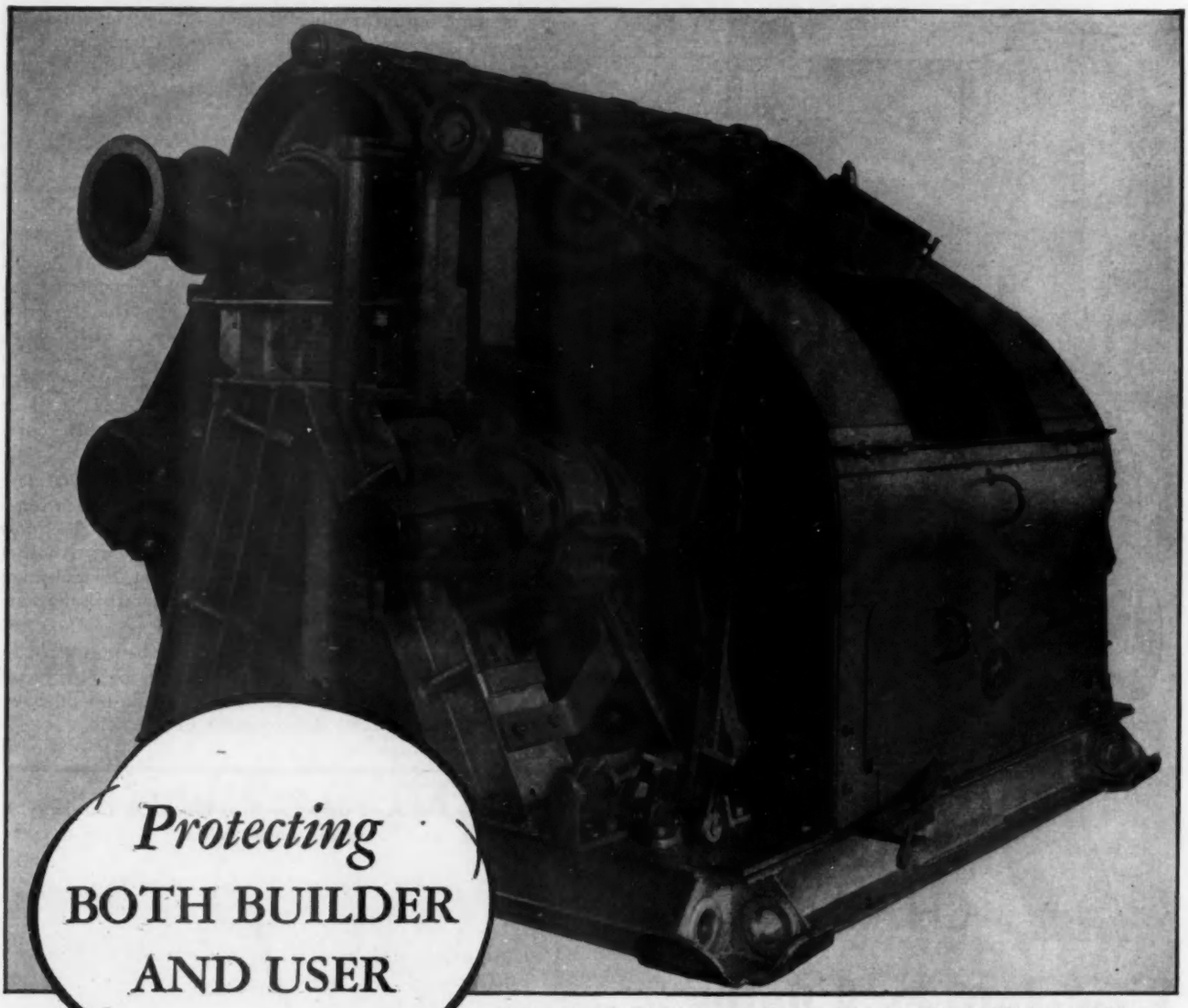
Summing up the problems in the field, and the major solutions, it is found that first the producing horizons must be handled with as much care as possible to keep it firm and prevent as much future caving as possible; second, washing with oil will prove a major benefit to the horizon and will bring about a greater ultimate recovery; third, proper type liners should be used and kept clean; and fourth, in some instances a greater part of the recovery can be had via flowing methods.

History of Jacob Field

Jacob field was discovered by Jacob, Buzzini & Pickett, Inc.'s (later Loma Oil Company) L. J. Corporation 2-A, completed in April, 1932, flowing 46 barrels per day from sand at 942-60 feet. The discovery well was drilled as an offset to Southern Natural Gas Company's L. Jacob 3, an old gasser at 750 feet.

The field has been extended to a length of over 14,000 feet, and a width of over 6000 feet. The north and south ends are still undetermined; a little water has been found on the east or downdip side. The field comprises around 1000 acres, and may reach as much as 1250 acres, but the sand conditions are such that not over a third of this will be really profitable for operation.

The surface beds in the field are shales and sands of the upper Jackson, the Dubose and Calliham members of the Whitsett group. They are very difficult to map in detail, as



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there is some minor faulting present, causing repetition of the beds. It appears that they represent a true picture of the subsurface conditions, when correctly interpreted, but they have not been any great aid in finding further pools.

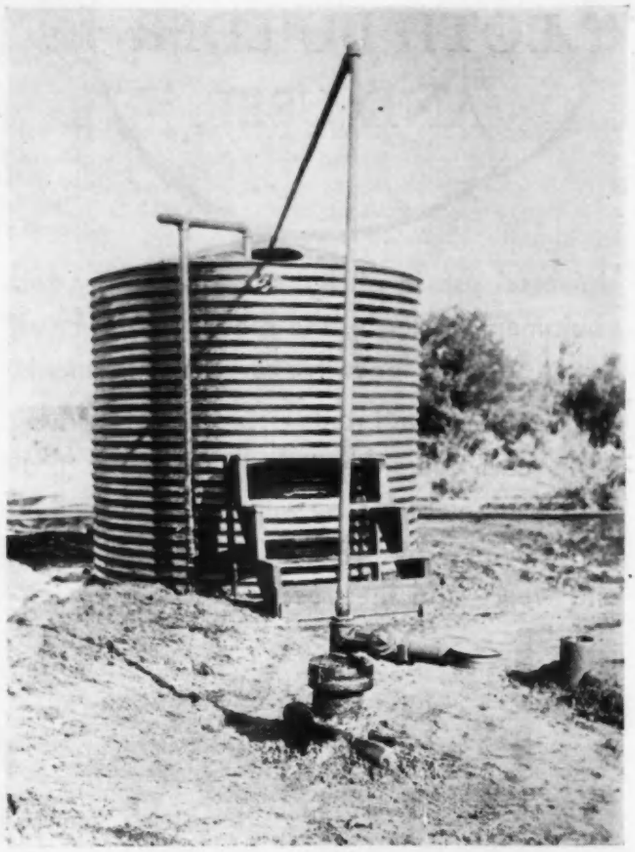
The general dip in the pool is from 60 to 100 feet to the mile which is a little flatter than the usual regional dip. There is a strike fault along the west side of the field, downthrown to the east, but this is not solely responsible for the oil production.

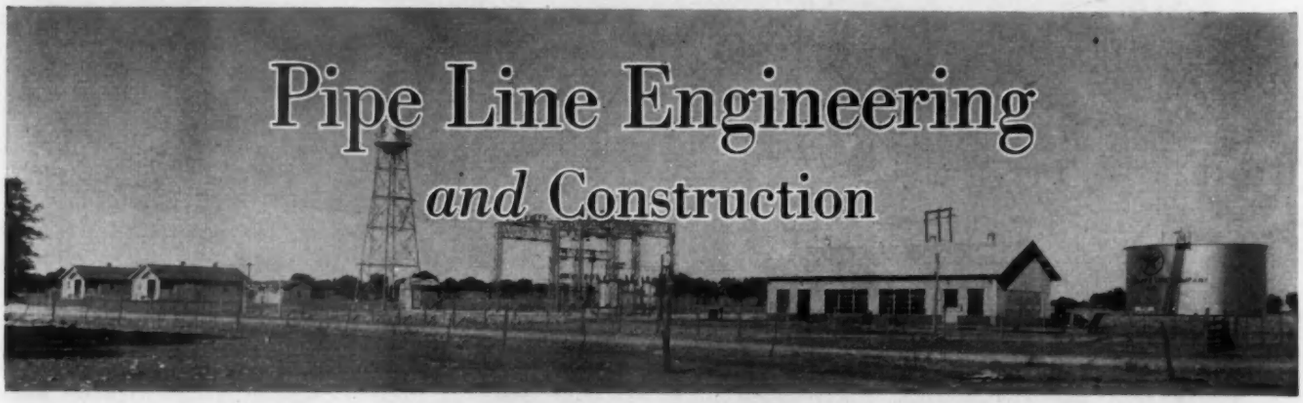
The sand at 750 feet is the Mirando sand of the Laredo district, and the gas production is probably largely due to the faulting. This sand yielded nearly a billion feet of gas from three wells, and reservoir adjustments after the wells were plugged made enough gas available in well, Jacob 1-A, to drill nearly 30 additional wells. The oil comes from a sand and sandy shale 200 feet deeper, and is correlated with the Pettus sand, lowermost Jackson in age. It is a soft sand, with porosity ranging up to 160, and probably represents the shoreward side of a lense in that zone.

One well in the field has been drilled some 700 feet deeper than the pay, finding various sands, some with a little gas, and all with salt water. It is not in the most favorable place from a structural point of view. Another well was drilled several years ago to 4500 feet, several miles east of the field, but the records are so poor that they are of little use.

Owing to the bulk of the producing area being owned by one operator (Loma Oil Company, successors to Jacob, Buzzini and Pickett) there has been but little boom, but a steady and very orderly development of the field.

Flowing well hook-up on well of Loma Oil Company in the Jacob field.





Adequate air filtration to power units, covering of moving machinery parts and building seams become necessary precautionary moves.

Dust Storms Require *Compressor and Pump* Equipment Protection

F. B. TAYLOR
Panhandle Eastern Pipe Line Company
Stinnett, Texas

DUST HAZARDS at compressor and pumping stations, as well as in the field, have recently become a serious problem. Never before in the history of the industry has dust control been so vital a consideration.

Western dust storms or "black blizzards" as they are popularly called, are by no means new. In the past they have been considered in the nature of phenomena and as a momentary inconvenience only. However, the swift spread of the menace within recent months has become a factor that demands attention. North and South Dakota, Nebraska, Colorado, Kansas, Oklahoma, Texas and New Mexico, and to a lesser extent the states fringing this great area, are affected.

Intake Air Filtration

Of all problems presented by these unabating storms, one of the most acute is adequate air filtration to power units. A number of types of such devices have been developed, each with its own advantages and adaptions.

Fundamentally, there are two general types of air cleaners that have been found satisfactory. These may be classed as first, dry; and second, as fluid cleaners.

The dry type air cleaner depends upon passing the dust-charged air through some variety of mesh material. Various meshing mediums, among them being such substances as glass wool, have been developed that function effectively, and that are so constructed that the mesh material can be changed when saturated.

The fluid cleaners, working on the principle of adhesion, make use of some fluid to catch foreign matter. In such types the intake air must be broken up by means of vanes, or by the production of a swirling motion so that the dust particles will come into intimate contact with, and adhere to, the fluid.

Such action has been effectively produced by a series of slowly revolving vanes set in the form of a continuous belt. Each vane is so cut that air in passing through is swirled to the sides. The vanes are covered with a film of the adhesive fluid and the foreign matter, in the air is captured as it touches the surface of the fluid. At the bottom of this type is a reservoir, or bath, through which the vanes travel and in which the foreign matter is deposited and a fresh coating of the adhesive fluid automatically applied to the vanes. This general principle has been in use for a number of years in industrial plants where it was necessary to clean large volumes of water.

Another development in the fluid type of cleaner employs the action of the incoming air to atomize the adhesive fluid. Air entering the unit lifts and distributes a percentage of the fluid throughout the air stream. Coming into intimate contact in this manner with the dust particles, they are freed from the air.

Being in such a finely divided condition the fluid is carried upward with the incoming air until it comes in contact with a screen of calculated mesh. Here the adhesive action is again employed, this time to separate the air and oil, and to return both the fluid and the impurities it carries to a lower reservoir.

By a swirling action of the fluid, which has remained

A rotary type air filtration unit on intake line to gas booster station auxiliary power

in the reservoir, collected particles are deposited in a settling tank.

Fluids suitable for these latter types of cleaners must first of all have an adhesive property similar to molasses. They must be non-vaporizing and non-combustible. The consistency must remain uniform and they should be of a viscosity determinable by their particular application.

The great quantity of foreign matter being carried in the air was brought out sharply in the Texas Panhandle recently when 20 pounds of matter were removed by one air cleaner after four days of operation. Just how much wear these particles would have produced on rods, packing, pistons and cylinders cannot be calculated.

Protection by Coverings

Considerable protection has been gained by placing removable canvas coverings over intermediate and rear crosshead guides. On small units metal frames have been constructed over and around moving parts, and over these the cloth is stretched. In many instances it has been found advisable to moisten these cloths with light engine oil. This aids greatly in cleaning the air that contacts the covering.

Greases are being kept in containers in airtight cabinets. Lubricating oils are usually filtered automatically, but where such action is not a function, oil-damp cloths are placed over containers.

Any buildings sufficiently tight to stop the dust are very rare; if they exist at all. The penetrative action of the dust is extreme.

Seams in metal buildings, windows, doors; each presents a problem. Solder has been used on metal seams; also a type of liquid compound somewhat resembling shellac but which is non-hardening. White lead and caulking compounds have been tried successfully around windows, electric outlets, mop boards and flooring.

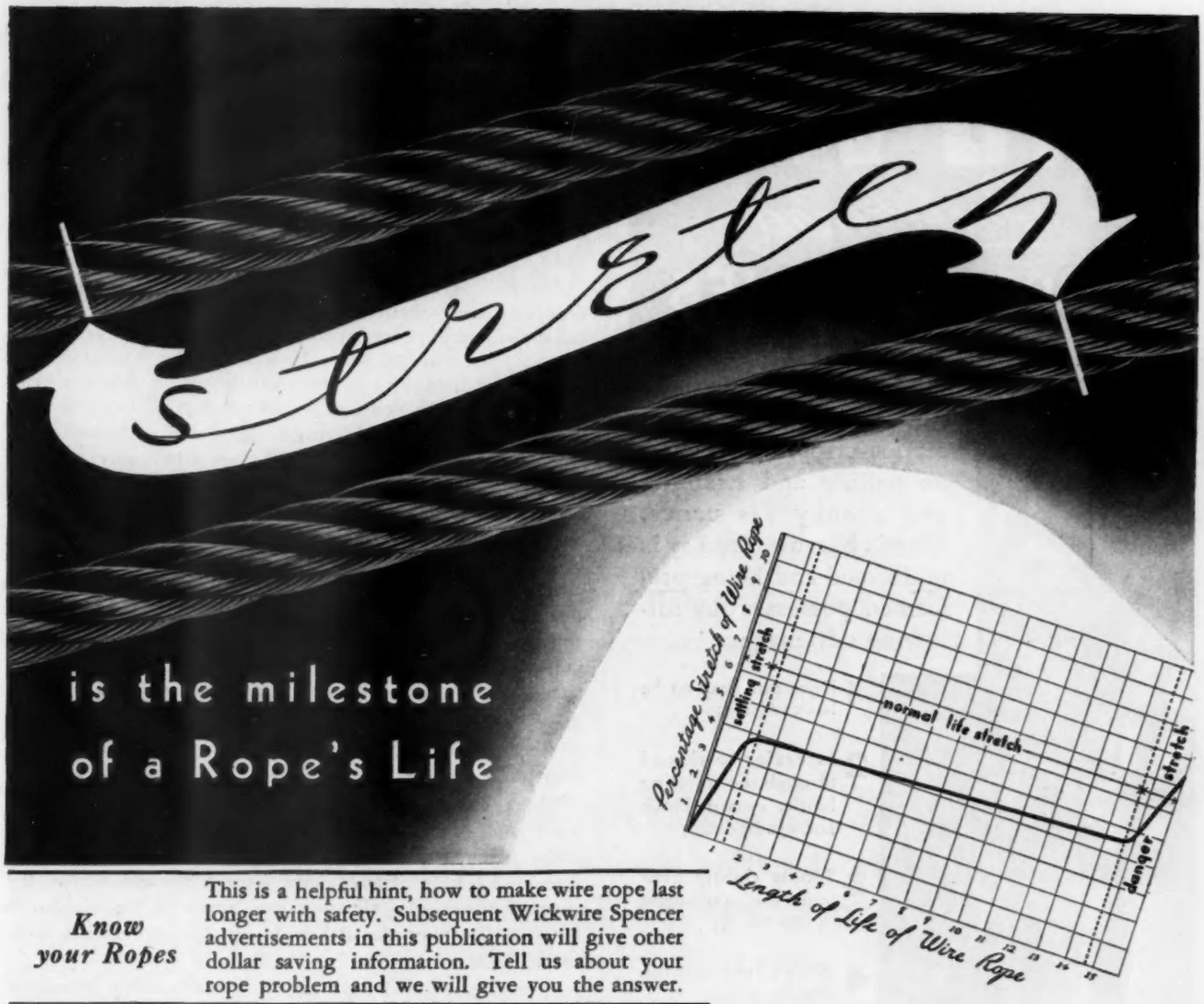
Narrow strips of rolled paper, gummed on one side, have proved effective on window frames and other places where the surface is smooth. Where a certain amount of draft was necessary, cheesecloth moistened with light oil catches a considerable portion of the dust and at the same time allows ventilation.

Company houses have been caulked with non-hardening plastic compounds at the junction of the foundation and woodwork on the outside, and inside wherever needed. Dovetailed wood or metal joints are not sufficient to keep out the dust.

Other Hazards

The amount of dust carried in the air each day is highly variable. The term "dust storm" very well describes the

A battery of 12 air cleaners feeding 1000-horsepower gas compressors in Texas Panhandle



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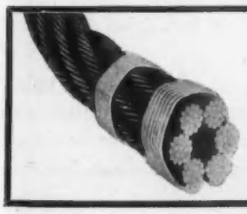

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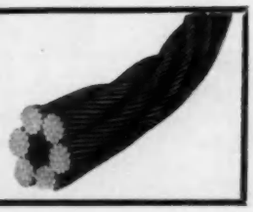

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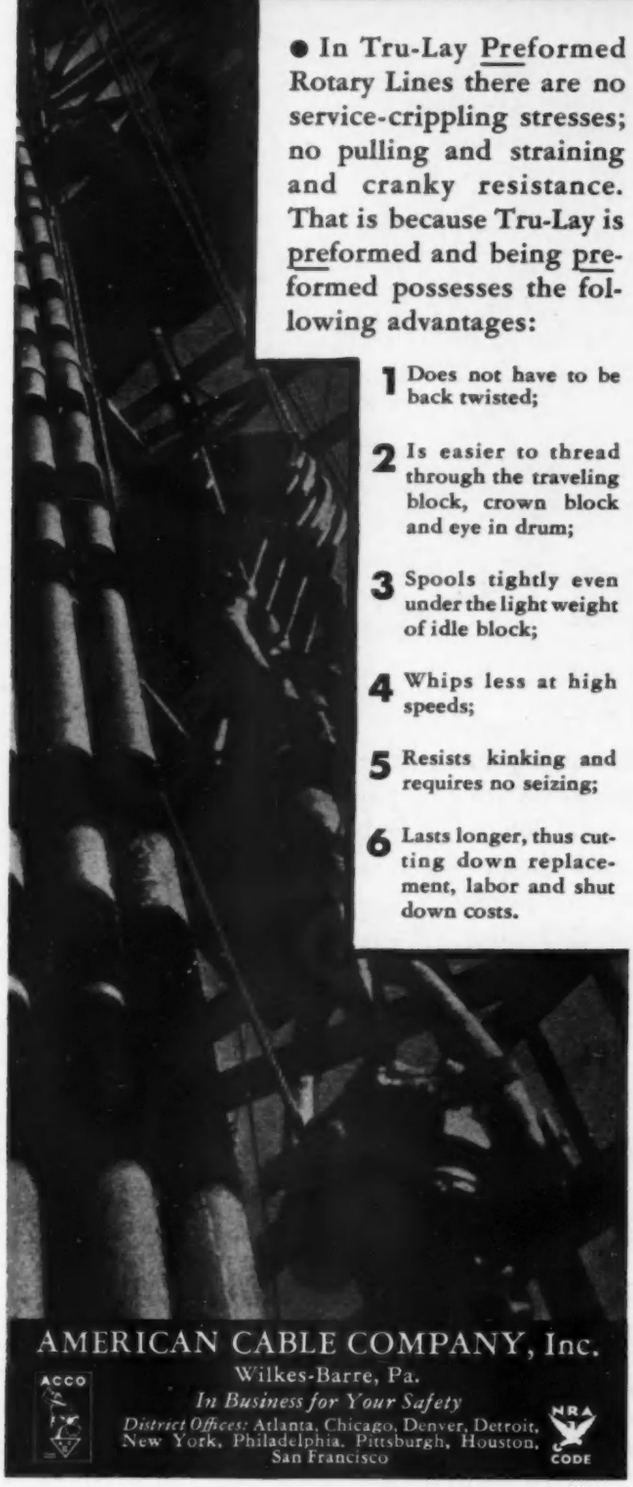

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rolling, twisting wall of matter that solidly blankets areas in its path. These have a more or less uniform front and travel in a definite direction. They finally lose their impetus and cast the dust over a much wider area than that actually covered by the storm itself. Another type of disturbance is highly irregular and although the wind may be of greater velocity than during a duster, the amount of matter in the air is considerably less. A number of observers have reported on this fact, which apparently calls for an explanation.

Analysis of the dust has shown it to be, in general, of very minute particles of topsoil, and consisting of volcanic ash and abrasive silicious crystals mixed with the expected proportion of salts. It appears as a brown fog in the air and breathing it continuously may produce a type of pneumonia. In some cases where outside work is necessary under bad conditions, goggles and respirators are worn by workmen. These devices are admittedly cumbersome, and are a pleasure to remove, but at times have been found necessary. Many men have made it a practice to cleanse the eyes by bathing with boric acid or some other solution each evening.

General Conditions

Roads in many sections of the dust area have been blocked. Drifts fence-post high are not uncommon. Driving during a bad dust storm is extremely hazardous. Company drivers frequently turn on their lights; not in order to see the road, but so they can be seen at a greater distance than can a car or truck.

These road drifts are almost always due to tumbleweed and other brush lodging against wire fences, the drifts being started from such collections. In many instances all wire strands have been stretched across the tops of the posts, allowing the brush to be blown on through. Burning the debris is another preventive measure.

It has been found necessary to remove cattle guards in some locations. The expense necessary to keep them free of dirt was greater than the convenience afforded.

In Kansas, Oklahoma and Texas, drip and gate boxes have been completely filled with dirt. The cost of cleaning out such an average box is between two and nine dollars.

In the same areas, lateral and other lines have been bared by the action of the wind. It has been noticed that wind carrying dust particles has a tendency to produce erosion with far greater rapidity than wind alone. Erosion over buried lines has been overcome by refilling with ordinary dirt and placing enough rock on the fill to break the force of the wind.

It appears evident that the prevalent dust storms are the result of inadequate rainfall in the area. There is not sufficient ground covering to hold the topsoil firm. A very slight breeze, even though not strong enough to lift the dirt into the air, will drift it about like snow.

Also, it does not appear that the menace will become less without moisture. With the advance of summer, the ground coverage in some areas will become heavier, aiding to a certain extent, but in other localities such aid is considered doubtful without rain.

Considerable experimental work is at present being done in attempts to even more completely eliminate the dust hazards in the industry. The added expense incurred on operating companies by the dust menace has become such a factor in many localities that it cannot be ignored.

An Announcement

★ In keeping with its policy laid down in 1922 when The Oil Weekly became a specialized publication, devoted to the production and pipe line branch of the oil industry, we have constantly endeavored to improve its editorial content. Throughout the lean years of the depression its editorial content was not lessened nor its quality lowered.

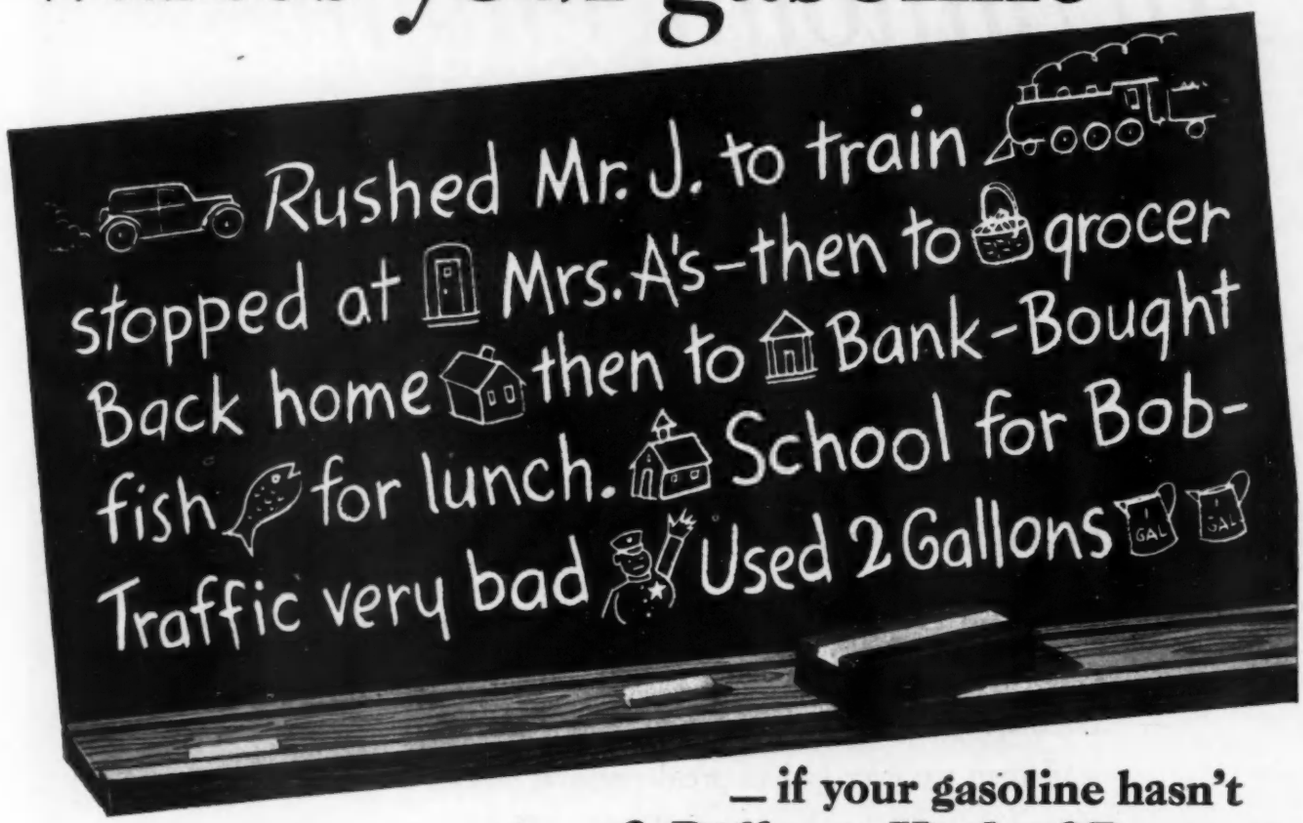
★ With the beginning of 1934 the publishers, on the contrary, appropriated additional sums to add additional staff men and new features. For some time we have had a much larger and stronger staff than we ever had in pre-depression times. The response of the oil industry has been remarkable. "The largest subscriber circulation among producing and pipe line men," "the largest renewal percentage on subscriptions" are but two of the many evidences we have received.

★ But it is no secret that costs of manufacturing practically every item have increased materially during the past eighteen months.

★ Therefore, effective with the issue of July 1st, the subscription price of The Oil Weekly will be advanced to $2 per year. Subscriptions received between now and July 1st, will be accepted at our present rate of $1 per year.

Ray L. Dudley, *Publisher.*

Stop-and-go driving wastes your gasoline


Rushed Mr. J. to train
stopped at Mrs. A's—then to grocer
Back home then to Bank—Bought
fish for lunch. School for Bob—
Traffic very bad Used 2 Gallons
1 GAL
1 GAL

—if your gasoline hasn't these 3 *Different Kinds of Power*—

4 OUT OF EVERY 5 miles you drive are within 25 miles of your doorstep . . . neighborhood driving . . . making business, shopping and social calls.

Yet your yearly short trips can run up as much mileage as CROSSING THE UNITED STATES 3 TIMES!

This continual "stop-and-go" wastes your money—unless your gasoline has *3 distinct kinds of power—PERFECTLY BALANCED.*

It must have POWER for quick starting . . . POWER for swift pickup . . . POWER for steady running.

Super-Shell, the first truly *balanced* gasoline, has these 3 kinds of power, and so CUTS YOUR DRIVING COSTS in three ways:

Can save up to a cupful of gasoline on "Cold" Starting—In summer or winter, Super-Shell starts instantly, often warms up in *half* the time of ordinary gasoline—with less choking. So you use less gasoline.

Can save up to a cupful of gasoline in 10 Minutes of Hard Pulling—With Super-Shell's even volatility, you can race up steep hills *on less gasoline.* And you avoid that *knocking* which alone in a few minutes can waste up to 10% of your power.

Can save up to a cupful of gasoline in One Hour of Steady Running—many motorists report. Every drop of Super-Shell vaporizes more completely. At all speeds, it delivers maximum power. On your long drives as well as on your short trips, it saves you money.

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FOREIGN DEVELOPMENTS AND TECHNOLOGY

Tanker Traffic Through Suez Canal Declines

HORACE REMILLARD

DURING February, 1935, 32 steam and 33 motor tank ships passed in transit through the Suez Canal, with an aggregate net tonnage, Suez Canal measurement, of 339,452 net tons. Cargo transported amounted to 389,837 deadweight tons. (Cargo tonnage.)

This trade declined by 77,160 net tons of shipping, Suez Canal measurement, as well as by 14 transits and by 49,559 deadweight tons of cargo as compared with January, 1935.

Tank ships comprised 15.85 percent of the total transits during February, 1935, and as they constitute approximately 14.27 percent of the total net tonnage passing through the Suez Canal, they were the source of 11.95 percent of the total tolls collected. They carried 18.65 percent of the total cargo in transit through the Suez Canal.

Analysis of Tanker Trade

The number aggregate net tonnage, and cargo of tank ships passing through the Suez Canal during the month, classified by direction and nationality of vessels, are given in the following table.

Nationality	No. of transits	Cargo tonnage
Northbound		
British	22	203,048
Norwegian	11	116,236
	33	319,284
Southbound		
British	26	9,000
Norwegian	4	40,827
Russian	1	9,200
Dutch	1	11,526
	32	70,553

Mineral Oil Traffic

The term "bulk cargo" means shipments of one commodity loaded aboard a vessel which does not carry other classes of merchandise.

	February, 1935 Tonnage	Cargoes	January, 1935 Tonnage	Cargoes
A. *Northbound*				
Benzene	160,299	16	121,591	13
Fuel oil	34,823	4	101,573	12
Crude oil	51,447	5	100,506	10
Kerosene	48,836	5	36,110	5
Gas oil	13,865	2	35,767	4
Diesel oil	9,386	1	10,217	1
Furnace oil	10,378	1	.....	.
	329,034	34	405,764	45
B. *Southbound*				
Benzene	36,533	4	11,350	1
Kerosene	13,294	1	15,064	2
Fuel oil	20,726	2	1,770	1

Northbound shipments of mineral oil passing through the Suez Canal during February, 1935, showed a decline of 76,730 deadweight tons, as well as one of 11 transits, as compared with January, 1935. There were 34 bulk cargoes of mineral oil aggregating 329,034 deadweight tons, as against 45 bulk cargoes totalling 405,764 deadweight tons during the previous month.

Shipments of benzine (gasoline) during the month consisted of 16 bulk cargoes of 160,299 deadweight tons. Of these shipments, only one cargo of 10,176 deadweight tons originated at Balikpapan, Dutch East Indies, the balance, 15 cargoes of 150,123 deadweight tons, originating at Abadan, Persia. These shipments were carried by six British and 10 Norwegian tankers.

Of the five shipments of crude oil totalling 51,447 deadweight tons, three of 32,160 deadweight tons originated at Pulo Sambo Island and two of 19,287 deadweight tons at Abadan, Persia. Shipments were carried by three British and two Norwegian tankers. These originating at Pulo Sambo Island were bound for Pauillac, France, whereas those from Abadan for Swansea, England.

Shipments of kerosene consisted of five bulk cargoes of 48,836 deadweight tons which originated at Abadan, Persia. All shipments were carried by British tankers and were bound for Lands End, Rotterdam and Antwerp.

Shipments of fuel oil consisted of four bulk cargoes of 34,823 deadweight tons, all of which originated at Abadan, Persia. All shipments were carried by British tankers and were bound for Malta, Lands End, England, and Rouen, France.

Two shipments of gas oil from Abadan, Persia, of 13,865 deadweight tons carried by British tankers, and were bound for Lands End, England, (8610 deadweight tons) and Trieste, Italy (5255 deadweight tons).

One shipment of furnace oil of 10,378 deadweight tons from Abadan, Persia, carried by a British tanker, decharged its cargo at this port for bunkering purposes.

One shipment of 9386 deadweight tons of Diesel oil from Abadan, Persia, was bound for Oslo, Norway, in a British tanker.

Four shipments of benzene of 36,533 deadweight tons from Batum, Soviet Russia, were billed for Yokohama, Japan, (17,666 deadweight tons) and Vladivostok (18,867 deadweight tons). These shipments were carried by three Norwegian and one British tankers.

Two shipments of fuel oil of 20,726 deadweight tons from Batum, Soviet Russia, were bound for Suez, Egypt, (11,526 deadweight tons) and Vladivostok (9250 deadweight tons). The first was carried by a Dutch tanker and the second by a Russian tanker.

One shipment of 13,294 deadweight tons of kerosene from Batum, Soviet Russia, was bound for China and was carried by a Norwegian tanker.

Canadian First Quarter Production Shows Decline

Dominion Bureau of Statistics at Ottowa reports that the production of crude petroleum in Canada during March reached a total of 120,537 barrels. In

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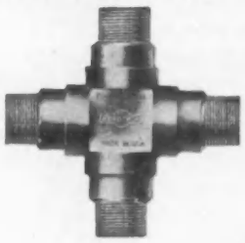

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February 111,545 barrels were produced and in March, 1934, the output was 130,046 barrels. During the three months ending March, Canada produced 356,736 barrels of crude petroleum as compared with 371,017 barrels a year ago.

Production from Alberta sources totaled 108,082 barrels, consisting of 102,727 barrels of crude naphtha and 1870 barrels of light crude oil from the Turner Valley field, 2178 barrels of light crude oil from the Red Coulee field and 1307 barrels of heavy crude oil from the Wainwright field.

Natural gas production in Canada during March totaled 2,426,943 thousand cubic feet; in February 2,353,712 thousand cubic feet were produced and in March, 1934, the output was 2,598,738 thousand cubic feet. Production during the first quarter of 1935 amounted to 8,023,619 thousand cubic feet as compared with 8,257,614 thousand cubic feet in the corresponding period of 1934.

PRODUCTION OF PETROLEUM IN CANADA, BY MONTHS, 1933-1935

Month	Barrels 1935(a)	Barrels 1934(a)	Barrels 1933
January	124,654	124,425	82,792
February	111,545	116,546	73,101
March	120,537	130,046	87,241
April		118,890	84,989
May		117,693	90,686
June		109,022	114,380
July		120,772	100,445
August		114,778	101,533
September		114,242	98,273
October		122,056	107,054
November		113,228	108,323
December		117,113	113,724
Total—Calendar Year		1,418,811	1,162,541
Total—Three months ending March	356,736	371,017	243,134

Belgian Mystery Test Will Drill Near Moll

Near the Belgian town of Moll, a short distance from the Dutch frontier, unidentified parties have erected a derrick and drilling rig, said to be the latest word in modern equipment, for a deep test there, according to a communication received by THE OIL WEEKLY May 23.

A geologist by the name of Vingerhoets, who claims to have been the discoverer of Hannover field in Germany, apparently has charge of activities at the rig, but refuses to divulge the identity of his backers.

Canadians Seek Removal Of Duty on Petroleum

Hearings will be held by the Canadian Tariff Board at Vancouver on May 20, and at Calgary on May 27, 1935, on an application for the removal of the duties on crude petroleum and its derivatives.

Rumanian Operators Vote Funds for Natural Gas Line

Representatives of Steaua Romana, Astra Romana, Romana-Americana, Concordia, Unirea, Colombia and Prahova Companies met in Bucharest recently and voted to subscribe the estimated $2,200,000 necessary to construct a natural gas pipe line and compressor stations from Prahova district to Bucharest.

The meeting came after two months suspension of activities on the project, due to agitation caused by the proposed monopoly of oil products.

According to a letter received from Bucharest, May 20, the above named organizations will participate equally in the shares of the new organization and in contributions to finance the laying of the line and erection of compressor stations. Responsibility for the supply of natural gasoline for the line also will be prorated among those organizations.

The letter from Rumania states it is certain that work on the pipe line will be well under way during 1935, even if the line is not finished then.

Permits Granted for Two New Canadian Refineries

Following allowance of tax exemptions as a special inducement to refinery construction in the municipality of Point-aux-Trembles, Montreal, Pacific Oil Company and Cie Mongeau et Robert, Limitee, have announced intentions of refinery constructions in that municipality.

The Metropolitan Commission of Montreal has approved application of the Pacific Oil Company for construction of a $3,000,000 refinery. Site for the refinery has been purchased and reservoirs are scheduled to be completed by or before 1940.

Cie Mongeau et Robert, Limitee, has also been authorized to enter this territory and has announced its intention of expending $500,000.

Tin and Chromium Are Used in New Motor Oil

Tests in the National Physical Laboratory of England are said to have shown a 50 percent reduction in cylinder wear as a result of a new motor oil containing minute quantities of tin and chromium in solutions. These, it is claimed, virtually plate the working parts of the engine and just as the chromium plated steel is proof against rust, cylinders and piston rings fed with this oil are protected against corrosion, which research has proved to be one of the chief causes of cylinder wear.

MARKETS and STATISTICS

General Improvement of Oil Markets Continue

THERE was further improvement in the oil industry's markets last week, and indications point to continued firmness of prices if not additional gains.

Market improvement of last week consisted of slight increases of prices throughout the chain from well to consumer. In Western Kentucky crude was raised five cents a barrel when a posting of $1.13 was made May 22. At Mid-Continent refineries the tank car prices on third grade gasoline and kerosene were increased one-eighth cent a barrel. At service stations in various sections of the country further small increases of prices occurred.

At present levels relatively favorable prices are prevailing throughout the industry, with producing, refining, and marketing divisions all in position to show profit, generally speaking.

Demand for petroleum and products is comparatively high, being not far under the all-time peaks, and running slightly ahead of last year. Supply is being held, meanwhile, in close balance with the demand. It is primarily upon this favorable supply-demand relationship that the present strong markets are based.

Continuing to contribute greatly to the successful balancing of supply with demand is the effective control of the East Texas field. The state and federal authorities are continuing to hold unauthorized output of oil to relatively low levels.

The effective East Texas control was reflected last week in the one-eighth cent increase of the tank car price of third grade gasoline throughout the Mid-Continent. It has also been reflected in continued firmness of the retail markets within Texas, which formerly were kept depressed by trucking of hot gasoline out of East Texas.

The third-grade gasoline prices rose last week one-eighth cent a gallon in East Texas, North Texas, and the Group Three (Oklahoma) area. Following the improvement, the prices were 4⅝ cents a gallon at East Texas and North Texas refineries, and 4¾ cents in Oklahoma. Prices indicated were those applying on U. S. motor gasoline rating below 62 octane.

Standard grade U. S. motor gasoline, 62-67 octane, was quoted, meanwhile, at 5 cents a gallon in East Texas and North Texas, and at 5⅛ cents in Group Three region. Premium grade, 68-70 octane, was selling in East Texas and North Texas at 5¼ cents a gallon, and in Group Three area at 5½ cents.

Kerosene prices have continued to improve. Last week, like several preceding weeks, brought an eight cent advance in East Texas, the new price being 3⅞ cents a gallon. The upward movement was arrested, however, in North Texas and Oklahoma, where prices continued at 3⅞ and 4 cents a gallon, respectively.

Group 3 Refined Market Is Unchanged

INTER-REFINERY buying and heavy shipments under contract continued to effect the Mid-Continent spot market along with bad weather throughout most of the consuming area during the week. However, the effect was primarily on the demand, and prices for third-grade U. S. motor, 62 and below octane, remained steady at an absolute low of 4⅝ cents. The 400 end point materials were bringing 4¾ cents, one-eighth cent above the Chicago market. It is believed by some observers that failure of a large spring demand to develop normally may cause many jobbers to coast along as best they can until July 1, 1935 when federal tax on gasoline may be removed. The only additional strength that could be detected during the week in the motor group was the inability to buy any material at less than the spot quotation. For the past several weeks there have been small amounts upon which some refiners were willing to make concessions but this practice seems to have passed. Burning oils and naturals were in good demand with prices holding strong.

In Oklahoma City the market continued to ride along at about an eighth of a cent above the average Group 3, Oklahoma price. Practically all refiners in the area have been experiencing difficulty in securing sufficient crude stocks. It is reported that Phillips Petroleum Company has recently been offering crude at $1.00 plus five cents per barrel and that several of the small refiners have taken advantage of the offer. This, however, is a cash on the barrel head proposition which eliminates many.

California Production Very Near Allowable

ALTHOUGH the retail gasoline market in Los Angeles area and in the San Joaquin Valley is in a demoralized condition, larger marketers and refiners still feel the situation will right itself, and that the Sales Agency agreement will be renewed for another year from June 15.

Tank wagon and service station prices have been reduced 1.5 cents a gallon in the San Joaquin Valley. Shell Oil Company led in reducing prices at Bakersfield and other leading marketers followed. It is understood threats of a similar reduction in Southern California are hanging fire, awaiting efforts of leading marketers through the Agency to remedy a fairly bad condition.

Four hundred cut price service stations in the Los Angeles area have been notified they can expect no further gasoline deliveries until they restore their prices. Any station can notify the Agency that regular prices have been restored and an agent is sent out to check up. Where deliveries are resumed, no such station can buy to exceed 100 gallons a day, this to prevent building up of a reserve stock. In this manner, it is hoped prices can be stabilized.

Only one refiner in the state is still refusing to abide by the new agreement, and meetings have been held frequently in both Los Angeles and San Francisco in the past two weeks to find a common ground for all parties.

The silver lining to the cloud is the

indication that crude oil production is under better control now than for several months. The official allowable production for California has been increased 18,500 barrels to 512,700 barrels a day for June. Production during the first half of May was about 15,000 barrels a day above allowable, and a much lower production is expected the last half of the month, possibly bringing May's production within the official figure.

There is very little hot oil produced in the state and price cutting refiners are having more and more trouble in securing their crude. This situation makes for stabilization, and it is further understood the production of natural gasoline is being curtailed.

Fuel oil prices are rather stiff. Some spot purchases can be made among small refiners at 60 to 65 cents, but the larger companies are asking higher prices. Stocks are satisfactory, and no refiner is burdened with a large storage. Navy bids ranged from 97.4 cents to 95.75 cents. The Texas Company bid of 87.4 cents to 93.4 cents was low.

East Texas Tank Car Shipments

Week Ending May 19, 1935

PRODUCTS	No. Cars	Estimated Gallons
Gasoline	481	3,888,280
Casinghead Gasoline	158	1,368,899
Fuel Oil	87	814,302
Distillate	59	478,463
Kerosene	35	281,888
Gas Oil	26	211,922
Residium	4	32,846
Naphtha	4	32,557
Total	854	7,109,157
Total Previous Week	945	7,871,437
Interstate	422	.....
Coastwise	243	.....
Intrastate	189	.....
Total	854	.....

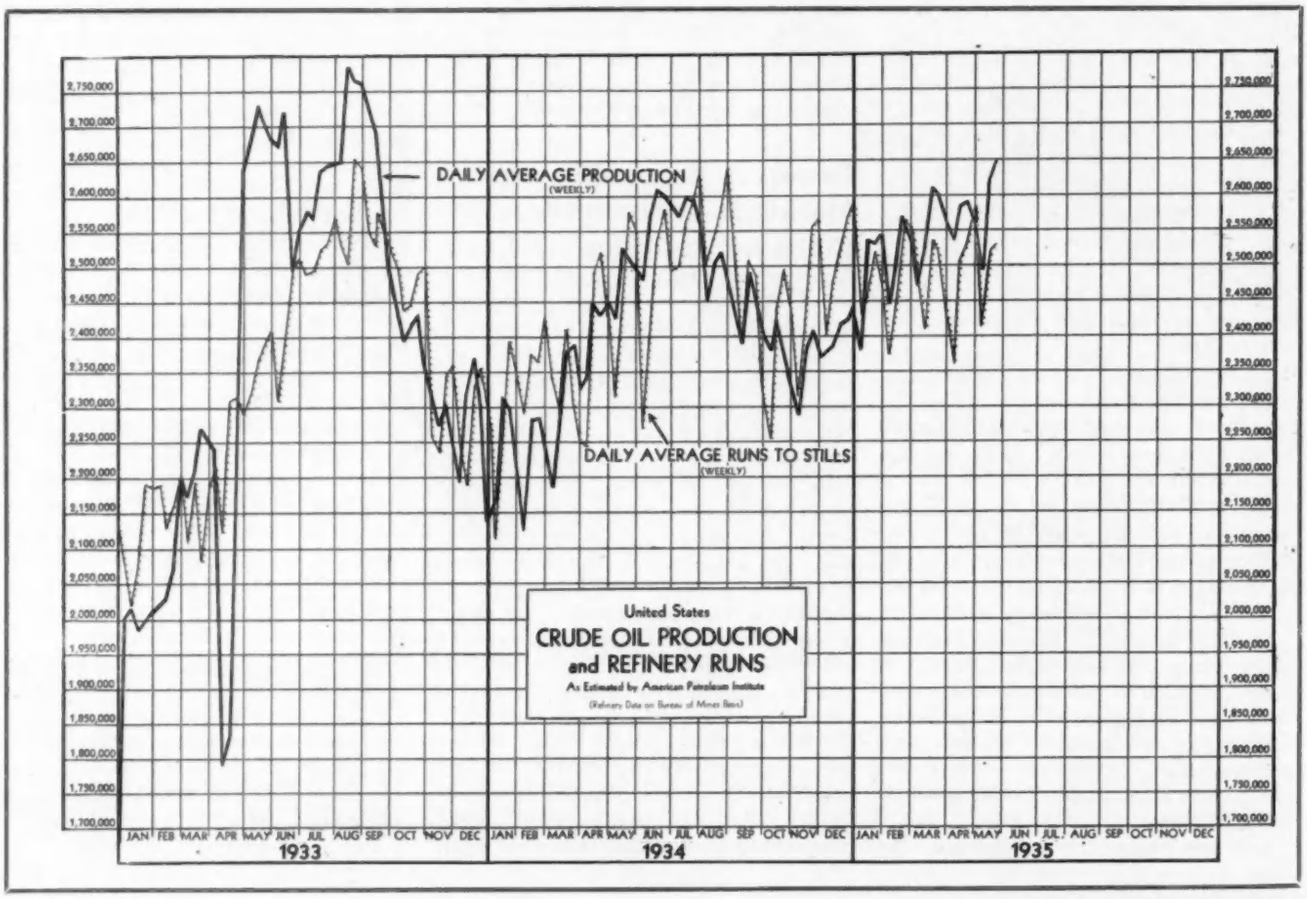
East Texas Hot Oil Volume Increased

VOLUME of illicit crude production in the East Texas field was on the upgrade the past week with three of the 25 operating plants ignoring tender requirements although the remainder of the active refineries are obtaining approved tenders from the state. A minority group are credited with processing products of a questionable origin, due to conflicting data on maximum gasoline recovery possible from said plants.

Reports covering hot oil production in the field for the week ending May 20 estimate the volume at from 15,000 to 20,000 barrels daily, with a slight gain taking place late last week. This increase in excess production has forced the prevailing tank truck price on gasoline down to nine cents per gallon including five cents taxes as compared to a temporary high mark of 9½ cents the week previous.

East Texas refineries adhering to the requirements of the state and federal tender boards have been promised additional market support from the majors on their gasoline production. Only four majors were buying the past week but prices on 400 end point material remained near the 4½-cent level.

Dallas, Texas. — General offices of Rancho Oil Company and Gem Oil Company, producing units in North Texas and South Texas, respectively, for the Josey interests, have been moved from Fort Worth to the tenth floor of the First National Bank Building, Dallas.



Texas June Allowable Is Increased 13,748 Barrels

Austin, Texas.—The Texas Railroad Commission has issued a new proration order for the month of June, fixing a total state allowable of 1,044,309 barrels per day, approximately.

The new allowable is 14,991 barrels below the allocation to Texas recommended to the railroad commission by the Bureau of Mines as the probable consumer demand for Texas oil during the month.

Allocations total 13,748 barrels more than the state allowable in effect for the month of May. A large amount of this increase may be accounted for by accretions resulting from the addition of new completions. For example, the East Texas field allowable was 447,160 barrels per day on May 1; the commission estimates that the field allowable will be 462,094 barrels on June 1, an increase of 14,934 barrels, but the allowable remains 3.4 percent of the hourly potential.

Increases for 43 fields were ordered, while 39 were reduced.

Howard-Glasscock was granted the largest increase, 2978 barrels daily, which became effective on May 17. This action was taken to supply oil for one of the Cosden refineries which had been closed down.

McCamey was increased 1000 barrels resulting in an allowable of 5800 barrels per day. The commission recognized the increased number of completions in Cayuga and ordered a 1000-barrel raise for that field. Iatan-East Howard was increased 500 barrels to 3000 barrels per day, Sinton was increased from 62 to 427 barrels, and Dirks was raised 450 barrels to 600 barrels per day. The rest of the increases were much smaller.

Although reductions were ordered in 39 fields, the total cut was less serious than that figure would indicate. Big Lake was reduced 1000 barrels to 11,000 barrels per day; New Bruni was cut 1407 barrels to 2910 barrels, the largest reduction ordered. Samfordyce was reduced 529 barrels to 2891 barrels per day.

A reduction of 429 barrels brought Refugio-Fox down to 2710 barrels per day. In 14 of the fields the reductions were 10 barrels per day or less.

New Fields

Three new fields received allocations on the schedule for the first time. Netterville was granted an allowable of 20 barrels per day. Mercedes was allowed 200 barrels per day, and Anahuac received 300 barrels.

The commission has transferred from the Gulf Coast to the Southwest Texas district, 28 fields which have been carried in the Coastal area. As a result of this transfer, the Southwest Texas district allowable increased from 61,479 barrels on May 1 to 88,697 barrels on June 1. The Gulf Coast district showed a corresponding decline, dropping from 175,298 barrels on May 1 to 140,068 barrels on June 1.

In the table below the relative district allowables on May 1 and June 1 are listed.

DISTRICT	May 1 Allowable	June 1 Allowable	Increase	Decrease
East Texas	447,160	462,094	14,934	.....
Panhandle	60,300	60,300	.....	.....
North Texas	59,400	59,400	.....	.....
West Central Texas	51,105	51,936	831	.....
East Central Texas	47,852	49,952	2,100*	.....
Southwest Texas	61,479	88,697	27,218	.....
Gulf Coast	175,298	140,038	.....	35,230
West Texas	127,967	131,862	3,895	.....
Totals	1,030,561	1,044,309	13,748	.....

*Kittrell, with an allowable of 875 barrels, was transferred from the Gulf Coast to the East Central Texa District.

United States Crude Oil Production Rate Lower

UNITED STATES crude oil production last week (ending May 25) was 38,325 barrels per day lower than in the previous week, and 52,750 barrels per day above the allowable recommended by the oil code administration. The new production average was 2,613,950 barrels daily.

The lower rate of production as compared with the previous week was the result of smaller output of Oklahoma and California. Texas, Louisiana and Kansas had slightly higher production.

California's output of 492,000 barrels daily last week was 18,000 barrels per day less than in the previous week and 2200 barrels per day less than the federal allocation to the state. California ordinarily shows excesses over the allowable early in each month, but then later in the month compensates by curtailment of output.

Oklahoma production averaged 523,650 barrels daily last week. That was 19,850 barrels per day less than the previous week's output, and 23,450 barrels a day more than the state's quota on the federal government schedule of allocations.

Kansas output last week averaged 152,900 barrels per day. It was 425 barrels a day higher than in the previous week, and 4500 barrels more than the federal allocation.

Texas production last week averaged 1,039,200 barrels daily, which was several hundreds of barrels more than in the pre-

United States Crude Oil Production

Estimates Compiled by THE OIL WEEKLY

District or State	Barrels Daily for Week Ending May 25	May 18
TEXAS—		
Texas Panhandle	65,900	65,800
North Texas	58,300	58,300
West Central Texas	25,600	25,100
West. Texas	150,900	151,200
East Central Texas	48,500	48,500
*East Texas Field	450,500	447,800
South Texas	60,400	63,200
Texas Gulf Coast	179,100	178,600
*Total Texas	1,039,200	1,038,500
OKLAHOMA—		
Oklahoma City	160,575	177,750
Seminole Area	130,925	134,925
Tatums	5,100	5,100
Lucien	11,350	11,175
Fitts	16,125	16,925
Others	199,575	197,725
Total Oklahoma	523,650	543,500
KANSAS—		
Ritz-Canton	7,250	7,450
Voshell	4,450	4,575
Nikkel-Hollow	9,050	9,325
Sedgwick	9,825	10,025
Burrton-Haury	26,800	28,275
Others	95,525	92,825
Total Kansas	152,900	152,475
LOUISIANA—		
North Louisiana	22,300	23,300
Louisiana Gulf Coast	108,100	105,400
Total Louisiana	130,400	128,700
ARKANSAS	31,200	31,400
CALIFORNIA—		
Long Beach	64,000	68,000
Santa Fe Springs	37,000	37,000
Huntington Beach	37,000	41,500
Dominguez	20,500	21,500
Inglewood	11,500	11,000
Ventura Avenue	35,000	28,000
Seal Beach	8,800	8,000
Midway-Sunset	50,000	53,000
Elwood	12,000	12,000
Kettleman Hills	52,000	62,000
Mountain View	7,500	9,500
Playa del Rey	13,500	11,500
Others	144,000	147,000
Total California	492,000	510,000
MOUNTAIN STATES—		
Wyoming	33,200	34,100
Montana	10,300	10,500
Colorado	4,600	5,000
Total Rocky Mountain States	48,100	49,600
NEW MEXICO	51,000	51,100
EASTERN STATES	106,600	107,200
MICHIGAN	38,900	39,800
*Total United States	2,613,950	2,652,275
*Surreptitiously produced oil in East Texas, not included in above figures, estimated at	10,000	10,000
Grand total including surreptitious production	2,623,950	2,662,275

Crude Runs to Stills; Finished and Unfinished Gasoline; Gas and Fuel Oil Stocks; and Cracked Gasoline Production, Week Ended May 18, 1935.

(Figures in thousands of barrels of 42 gallons each)

DISTRICT	Daily Refining Capacity of Plants			Crude Runs to Stills		Stocks of Finished Gasoline			(a) Stocks of Unfinished Gasoline	(b) Stocks of Other Motor Fuel	Stocks of Gas and Fuel Oil	Daily Charging Capacity of Cracking Units			Cracked Gasoline Production
	Potential Rate	Reporting		Daily Average	% Operated	At Refineries	Bulk Term., in Trans. & Pipe Lines	Total at Refys., Term., etc.				Potential Rate	Reporting		Daily Average
		Total	%										Total	%	
East Coast	612	612	100.0	474	77.5	5,983	10,536	16,519	943	240	9,307	534	469	87.8	87
Appalachian	154	146	94.8	107	73.3	1,201	835	2,036	343	130	680	79	78	98.7	24
Ind., Ill., Ky	442	424	95.9	358	84.4	6,527	3,138	9.665	814	55	4,325	349	338	96.8	116
Okla., Kans., Mo	453	384	84.8	262	68.2	3,370	2,167	5,537	684	425	4,021	256	228	89.1	66
Inland Texas	330	160	48.5	103	64.4	1,219	166	1,385	242	875	1,842	148	105	70.9	25
Texas Gulf	617	595	96.4	438	73.6	5,638	192	5,830	1,702	275	8,849	399	393	98.5	102
Louisiana Gulf	169	163	96.4	95	58.3	711	529	1,240	256	.....	3,255	77	74	96.1	20
North La.,—Ark	80	72	90.0	39	54.2	139	102	241	30	210	259	46	44	95.7	6
Rocky Mountain	97	60	61.9	49	81.7	1,041	.....	1,041	100	50	782	46	39	84.8	12
California	852	789	92.6	455	57.7	8,798	1,410	10,208	1,009	2,905	63,310	274	274	100.	55
TOTALS WEEK: May 18, 1935	3,806	3,405	89.5	2,380	69.9	34,627	19,075	53,702	6,123	5,165	96,630	2,208	2,042	92.5	513
May 11, 1935	3,806	3,405	89.5	2,371	69.6	34,949	18,931	53,880	5,970	5,030	*96,584	2,208	2,042	92.5	497

Below are set out estimates of Crude Runs and Cracked Gasoline Production on B. of M. Basis for Week May 18, 1935 compared with May 1934 Bureau figures.

Estimate B. of M. Basis May 18, 1935	2,530		570
Estimate B. of M. Basis May 11, 1935	2,520		550
U. S. B. of M. May 1934: Daily Average Crude Runs	2,460	U. S. B. of M. May 1934: Daily Average Cracked Prod.	487

(a) Amount of Unfinished Gasoline contained in Naphtha Distillates.
(b) Estimated; Includes Unblended Natural Gasoline at refineries and plants; also Blended Motor Fuel at Plants.
*Revised in East Coast District. Stocks as of week ended May 11, 1935 should reach 8,996,000 barrels

vious week, and about 6000 barrels a day more than the federal allocation.

The above figures do not include estimates of surreptitious production. Such output, chiefly in East Texas, has continued at an unusually low level. Last week it was indicated to have been about the same as in the previous week, when it was estimated that the average was around 10,000 barrels daily.

Hold Texas Hot Oil Investigation Hearing

Austin, Texas.—Members of the Texas legislative committee designated to investigate the "hot" oil situation, held their first meetings in Austin last week.

Representative Augustine Celaya of Brownsville, author of the resolution which resulted in the investigation, is acting as chairman. Other members of the commission are Sidney Latham, H. G. Steward, W. E. Jones and Harry Graves.

The legislature allowed the committee only $1000 to make the investigation, and a large part of the time last week was devoted to a discussion of the best method of handling this limited fund.

Outside sources have volunteered additional contributions to complete the work. Members of the committee indicated that they would not accept these funds if the information could be procured without it.

All sessions were behind closed doors, and only two witnesses were heard. These were J. D. Copeland, Jr., commission examiner formerly in the tender department in East Texas, and Olin Culberson, chief of the pipe line division which handles all tender work at the present time.

The committee recessed Thursday, announcing that the next meetings would be held in Longview about the middle of the coming week.

Kentucky Crude Higher

Raising the price five cents a barrel, The Ohio Oil Company made a posting of $1.13 a barrel for Western Kentucky crude effective May 22. It was the first change for about one year.

Oklahoma Crude Stocks Down 11 Million Barrels

Oklahoma City.—On August 1, 1934, crude oil stocks in Oklahoma amounted to 79,487,000 barrels and on April 1, 1935, the figure was 67,621,000 barrels, a reduction of 11,866,000 barrels, according to figures compiled by the Oil and Gas Conservation Department of the Corporation Commission. Reduction of crude oil stocks in the United States for approximately the same period was 17,582,000 barrels.

Comparison of Permits Granted for New Wells

STATE—	Week Ending May 18	Total this Mo.	Total this Year	Total this Date Last Year	1934 Year Total
Arkansas	2	6	57	15	100
California	33	79	364	199	629
Louisiana	18	61	338	319	799
Kansas	27	88	547	377	1,015
Michigan	23	63	194	190	460
Oklahoma	49	126	878	865	2,045
Texas	328	784	5,130	4,065	10,550
Totals	480	1,207	7,508	6,030	15,598

CRUDE OIL PRICE QUOTATIONS

(Figures Represent Basic or Flat Prices—Revised to May 24, 1935)

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Oklahoma-Kansas	28—$ .84	2¢	40—$1.08	9-29-33
N. and N.-C. Texas	28— .79	2¢	40— 1.03	9-29-33
Texas Panhandle				
Gray County	34— .79	2¢	40— .91	9-29-33
Carson-Hutchinson	34— .69	2¢	40— .81	9-29-33
West Texas				
Ector, Pecos, Wk'lr	*.75			9-29-33
Crane, Upton, Howard and Glasscock	*.70			9-29-33
East Texas	*1.00			9-29-33
Texas Gulf Coast				
Conroe	35— 1.09	2¢	40— 1.19	9-29-33
Tomball	*1.15			9-29-33
Cleveland	*1.00			1-11-34
†Goose Creek, Hull Liberty, Orange, Pierce Junction, Moss Bluff, Raccoon Bend, Sour Lake, Spindletop, Sugarland, West Columbia,	Below			
Humble, Rabbs Ridge	20— .82	2¢	34— 1.12	9-29-33
South and S.W. Texas	Below			
Refugio (Light)	20— .82	2¢	34— 1.12	9-29-33
Refugio (Heavy)	*.85			9-29-33
Saxet	*.85			9-29-33
Mirando	*.80			9-29-33
Pettus	*1.05			9-29-33
Salt Flat	*.87			9-29-33
Darst Creek	*.87			9-29-33
Arkansas				
El Dorado (Light) and Rainbow	29— .79	2¢	40— 1.03	3-17-34
El Dorado East Field and Smackover	*.70			9-29-33
North Louisiana	29— .79	2¢	40— 1.08	9-29-33
Urania	*.85-*.87			1- 1-34
South Louisiana	Below			
Lockport	20— .80	2¢	34— 1.10	9-29-33
	Below			
Iowa, Cameron Mds.	20— .70	2¢	34— 1.00	9-29-33
Rocky Mountain States				
Salt Creek	29— .84	2¢	40— 1.08	9-29-33
Elk Basin	*1.17			9-29-33

*All gravities—flat rate.
†Gulf Coast prices as posted by Humble Oil & Refining Company.

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Grass Creek (Light)	*$1.17			9-29-33
Big Muddy	*1.01			9-29-33
Rock Creek	*1.02			9-29-33
Sunburst	*1.35			9-29-33
Lance Creek	*1.02			8-25-33
Osage	*.62			8-25-33
Cat Creek	*.45			8-25-33
Ponders	*.65			8-25-33
Hog Back, N. M.	*1.00			9- 8-33
Lea County, N. M.	*.75			9-29-33
Mid-West States				
Lima	*1.15			2- 1-35
Illinois	*1.13			1- 5-34
Princeton	*1.13			1- 5-34
Western Kentucky	*1.13			5-22-35
California				
Signal Hill	14— .65	1¢	16— .66	9- 6-33
	17— .69	2¢	22— .84	9- 6-33
	23— .88	3¢	30— 1.09	9- 6-33
Seal B., Alamitos Hts.	19— .65	3¢	20— .68	9- 6-33
	21— .72	4¢	22— .76	9- 6-33
	23— .81	4¢	26— .93	9- 6-33
	27— .98	4¢	30— 1.10	9- 6-33
Huntington Beach	14— .65	4¢	15— .69	9- 6-33
	16— .72	3¢	19— .81	9- 6-33
	20— .83	3¢	28— 1.07	9- 6-33
	29— 1.09	3¢	30— 1.12	9- 6-33
Inglewood	14— .65	4¢	16— .73	9- 6-33
	17— .76	4¢	18— .80	9- 6-33
	19— .82	4¢	20— .87	9- 6-33
	21— .90	4¢	22— .94	9- 6-33
	23— .97	4¢	24— 1.01	9- 6-33
Playa del Rey	14— .65	1¢	15— .66	9- 6-33
	16— .69	4¢	17— .73	9- 6-33
	18— .76	4¢	19— .80	9- 6-33
	20— .83	4¢	21— .87	9- 6-33
	22— .90	4¢	23— .94	9- 6-33
	24— .97	3¢	25— 1.00	9- 6-33
			26— 1.04	9- 6-33
Olinda-Brea Canyon	14— .65	4¢	16— .73	9- 6-33
	17— .76	3¢	28— 1.10	9- 6-33
Athens-Rosecrans Domingues	23— .83	3¢	24— .86	9- 6-33
	25— .90	4¢	26— .94	9- 6-33
	27— .97	3¢	29— 1.04	9- 6-33
	30— 1.08	4¢	31— 1.12	9- 6-33
			32— 1.15	9- 6-33
Elwood (fob ship)	33— 1.03	3¢	37— 1.15	9- 6-33
Torrance	14— .65	1¢	15— .66	9- 6-33
	16— .69	3¢	20— .81	9- 6-33
	21— .83	3¢	26— .98	9- 6-33

*All gravities—flat rate.

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Richfield	15—$ .65	2¢	16—$ .67	9- 6-33
	17— .70	4¢	20— .82	9- 6-33
	21— .85	4¢	22— .89	9- 6-33
	23— .93	4¢	24— .97	9- 6-23
	25— 1.00	4¢	27— 1.08	9- 6-33
	28— 1.11	4¢	29— 1.15	9- 6-33
Whittier-LaHabra	15— .65	3¢	18— .74	9- 6-33
	19— .78	3¢	24— .93	9- 6-33
Montebello	19— .65	1¢	20— .66	9- 6-33
	21— .69	3¢	22— .72	9- 6-33
	23— .76	4¢	24— .80	9- 6-33
	25— .85	4¢	26— .89	9- 6-33
Coyote Hills	16— .65	3¢	19— .74	9- 6-33
	20— .78	3¢	29— 1.05	9- 6-33
	30— 1.09	3¢	34— 1.21	9- 6-33
Santa Fe Springs	21— .72	4¢	22— .76	9- 6-33
	23— .79	4¢	25— .87	9- 6-33
	26— .90	4¢	28— .98	9- 6-33
	29— 1.01	4¢	30— 1.05	9- 6-33
	31— 1.08	4¢	33— 1.16	9- 6-33
	34— 1.19	4¢	35— 1.23	9- 6-33
	36— 1.26	4¢	38— 1.34	9- 6-33
New Hall, McKittrick, Kern River	14— .57		19— .57	9- 6-33
Midway-Sunset, Elk Hills, Buena Vista Hills	17— .57	4¢	18— .61	9- 6-33
	19— .64	3¢	22— .73	9- 6-33
	23— .77	4¢	33— 1.17	9- 6-33
Lost Hills	17— .57	4¢	21— .73	9- 6-33
	22— .76	3¢	30— 1.00	9- 6-33
Coalinga	17— .57	1¢	18— .58	9- 6-33
	19— .62	3¢	21— .68	9- 6-33
	22— .72	3¢	25— .81	9- 6-33
Wheeler Ridge	17— .57	1¢	18— .58	9- 6-33
	19— .61	3¢	25— .79	9- 6-33
Kettleman Hills	33— .93	3¢	39— 1.11	9- 3-33
Pennsylvania				
Bradford	*2.20			5-16-35
Sw Pa. Pipe Line	*1.92			5-16-35
Eureka Pipe Line	*1.87			5-16-35
Buckeye Pipe Line	*1.77			5-16-35
Corning Grade	*1.32			10- 2-33
Michigan				
Central Michigan	*1.20			9-30-33
Muskegon	*.70-1.00			12-31-32
Canada				
Petrolia	*2.10			9- 9-33
Oil Springs	*2.17			9- 9-33

*All gravities—flat rate.

Summary of Wells Completed in the United States

Week Ending May 18, 1935

	Completions	Oil Wells	Gas Wells	Failures	Initial Production	Total Completions 1935	Total Completions this date 1934
Alabama	...	...	...	...	.....	3	1
Arkansas	4	2	...	2	390	71	23
California	21	20	...	1	11,925	295	132
Colorado	...	...	...	...	.....	5	6
Illinois	...	...	...	...	.....	8	5
Indiana	15	1	6	8	50	78	56
Kansas	25	12	....	13	5,460	547	307
Kentucky	...	...	...	...	.....	58	32
Louisiana	14	5	2	7	3,120	279	260
Michigan	13	8	3	2	670	152	159
Mississippi	2	....	1	1	.....	9	13
Montana	1	1	....	...	260	25	42
New Mexico	7	4	....	3	33,075	106	38
New York	...	...	...	...	.....	...	3
Ohio	8	4	2	2	15	531	317
Oklahoma	60	44	2	14	81,390	897	734
Pennsylvania	6	1	3	2	25	57	135
Texas	223	176	6	41	722,310	4,473	3,473
Utah	...	...	...	...	.....	.....	3
West Virginia	22	7	11	4	65	188	173
Wyoming	1	1	...	...	400	17	13
Totals this week	422	286	36	100	859,155	7,780	5,931
Totals last week	442	279	33	130	728,830	...	...
Totals this year	7,780	5,121	675	1,984	14,633,420	...	...

MAJOR PRICE CHANGES

	Penna. (Nat. Tr.)	Mid-Cont. (36 Gr.)	Calif. (26 Gr.)
March 5, 1933	.....	.....	Cut 24.
May 2, 1933	.....	Cut 19.	.....
May 9, 1933	Cut 20	.....	.....
May 22, 1933	Up 10.	.....	.....
June 19, 1933	Up 10.	Up 19.	.....
June 26, 1933	Up 10.	.....	Up 9-12
July 6, 1933	Up 13.	Up 10.	.....
July 17, 1933	Up 15.	.....	.....
July 28, 1933	Up 15.	.....	.....
August 11, 1933	Up 10.	.....	.....
August 24, 1933	.....	Up 10.	.....
August 30, 1933	Up 15.	.....	.....
September 6, 1933	Up 10.	Up 10.	Up 15.
September 8, 1933	.....	Up 15.	.....
May 1, 1934	Up 10.	.....	.....
November 6, 1934	Cut 25	.....	.....
December 6, 1934	Cut 25.	.....	.....
January 4, 1935	Up 15.	.....	.....
February 4, 1935	Up 15.	.....	.....
May 16, 1935	Cut 15.	.....	.....

CRUDE PRODUCTION TAXES

Oklahoma—Five percent of gross value less royalty interest.

Texas—Two cents or 2 percent, whichever is higher.

Louisiana—From four to 11 cents a barrel, depending upon gravity.

Arkansas—2.6 percent of gross market values.

Montana—Three percent of gross value at well and ½-cent per barrel.

Wyoming and New Mexico—Production tax based upon state and county assessments.

California—.66443 mills per barrel of oil produced and 17.39 cents per acre on proved oil lands.

Crude Runs to Stills; Finished and Unfinished Gasoline; Gas and Fuel Oil Stocks; and Cracked Gasoline Production, Week Ended May 18, 1935.

(Figures in thousands of barrels of 42 gallons each)

DISTRICT	Daily Refining Capacity of Plants			Crude Runs to Stills		Stocks of Finished Gasoline			(a) Stocks of Unfinished Gasoline	(b) Stocks of Other Motor Fuel	Stocks of Gas and Fuel Oil	Daily Charging Capacity of Cracking Units			Cracked Gasoline Production
	Potential Rate	Reporting		Daily Average	% Operated	At Refineries	Bulk Term., in Trans. & Pipe Lines	Total at Refys., Term., etc.				Potential Rate	Reporting		Daily Average
		Total	%										Total	%	
East Coast	612	612	100.0	474	77.5	5,983	10,536	16,519	943	240	9,307	534	469	87.8	87
Appalachian	154	146	94.8	107	73.3	1,201	835	2,036	343	130	680	79	78	98.7	24
Ind., Ill., Ky	442	424	95.9	358	84.4	6,527	3,138	9.665	814	55	4,325	349	338	96.8	116
Okla., Kans., Mo	453	384	84.8	262	68.2	3,370	2,167	5,537	684	425	4,021	256	228	89.1	66
Inland Texas	330	160	48.5	103	64.4	1,219	166	1,385	242	875	1,842	148	105	70.9	25
Texas Gulf	617	595	96.4	438	73.6	5,638	192	5,830	1,702	275	8,849	399	393	98.5	102
Louisiana Gulf	169	163	96.4	95	58.3	711	529	1,240	256	.....	3,255	77	74	96.1	20
North La.—Ark.	80	72	90.0	39	54.2	139	102	241	30	210	259	46	44	95.7	6
Rocky Mountain	97	60	61.9	49	81.7	1,041	.....	1,041	100	59	782	46	39	84.8	12
California	852	789	92.6	455	57.7	8,798	1,410	10,208	1,009	2,905	63,310	274	274	100.	55
TOTALS WEEK: May 18, 1935	3,806	3,405	89.5	2,380	69.9	34,627	19,075	53,702	6,123	5,165	96,630	2,208	2,042	92.5	513
May 11, 1935	3,806	3,405	89.5	2,371	69.6	34,949	18,931	53,880	5,970	5,030	* 96,584	2,208	2,042	92.5	497

Below are set out estimates of Crude Runs and Cracked Gasoline Production on B. of M. Basis for Week May 18, 1935 compared with May 1934 Bureau figures.

Estimate B. of M. Basis May 18, 1935	2,530		570
Estimate B. of M. Basis May 11, 1935	2,520		550
U. S. B. of M. May 1934: Daily Average Crude Runs	2,460	U. S. B. of M. May 1934: Daily Average Cracked Prod.	487

(a) Amount of Unfinished Gasoline contained in Naphtha Distillates.
(b) Estimated; Includes Unblended Natural Gasoline at refineries and plants; also Blended Motor Fuel at Plants.
*Revised in East Coast District. Stocks as of week ended May 11, 1935 should reach 8,996,000 barrels

vious week, and about 6000 barrels a day more than the federal allocation.

The above figures do not include estimates of surreptitious production. Such output, chiefly in East Texas, has continued at an unusually low level. Last week it was indicated to have been about the same as in the previous week, when it was estimated that the average was around 10,000 barrels daily.

Hold Texas Hot Oil Investigation Hearing

Austin, Texas.—Members of the Texas legislative committee designated to investigate the "hot" oil situation, held their first meetings in Austin last week.

Representative Augustine Celaya of Brownsville, author of the resolution which resulted in the investigation, is acting as chairman. Other members of the commission are Sidney Latham, H. G. Steward, W. E. Jones and Harry Graves.

The legislature allowed the committee only $1000 to make the investigation, and a large part of the time last week was devoted to a discussion of the best method of handling this limited fund.

Outside sources have volunteered additional contributions to complete the work. Members of the committee indicated that they would not accept these funds if the information could be procured without it.

All sessions were behind closed doors, and only two witnesses were heard. These were J. D. Copeland, Jr., commission examiner formerly in the tender department in East Texas, and Olin Culberson, chief of the pipe line division which handles all tender work at the present time.

The committee recessed Thursday, announcing that the next meetings would be held in Longview about the middle of the coming week.

Kentucky Crude Higher

Raising the price five cents a barrel, The Ohio Oil Company made a posting of $1.13 a barrel for Western Kentucky crude effective May 22. It was the first change for about one year.

Oklahoma Crude Stocks Down 11 Million Barrels

Oklahoma City.—On August 1, 1934, crude oil stocks in Oklahoma amounted to 79,487,000 barrels and on April 1, 1935, the figure was 67,621,000 barrels, a reduction of 11,866,000 barrels, according to figures compiled by the Oil and Gas Conservation Department of the Corporation Commission. Reduction of crude oil stocks in the United States for approximately the same period was 17,582,000 barrels.

Comparison of Permits Granted for New Wells

STATE—	Week Ending May 18	Total this Mo.	Total this Year	Total this Date Last Year	1934 Year Total
Arkansas	2	6	57	15	100
California	33	79	364	199	629
Louisiana	18	61	338	319	799
Kansas	27	88	547	377	1,015
Michigan	23	63	194	190	460
Oklahoma	49	126	878	865	2,045
Texas	328	784	5,130	4,065	10,550
Totals	480	1,207	7,508	6,030	15,598

CRUDE OIL PRICE QUOTATIONS

(Figures Represent Basic or Flat Prices—Revised to May 24, 1935)

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Oklahoma-Kansas	28—$ .84	2¢	40—$1.08	9-29-33
N. and N.-C. Texas	28— .79	2¢	40— 1.03	9-29-33
Texas Panhandle				
Gray County	34— .79	2¢	40— .91	9-29-33
Carson-Hutchinson	34— .69	2¢	40— .81	9-29-33
West Texas				
Ector, Pecos, Wk'lr	*.75			9-29-33
Crane, Upton, Howard and Glasscock	*.70			9-29-33
East Texas	*1.00			9-29-33
Texas Gulf Coast				
Conroe	35— 1.09	2¢	40— 1.19	9-29-33
Tomball	*1.15			9-29-33
Cleveland	*1.00			1-11-34
†Goose Creek, Hull Liberty, Orange, Pierce Junction, Moss Bluff, Raccoon Bend, Sour Lake, Spindletop, Sugarland, West Columbia, Humble, Rabbs Ridge	Below 20— .82	2¢	34— 1.12	9-29-33
South and S.W. Texas	Below			
Refugio (Light)	20— .82	2¢	34— 1.12	9-29-33
Refugio (Heavy)	*.85			9-29-33
Saxet	*.85			9-29-33
Mirando	*.80			9-29-33
Pettus	*1.05			9-29-33
Salt Flat	*.87			9-29-33
Darst Creek	*.87			9-29-33
Arkansas				
El Dorado (Light) and Rainbow	29— .79	2¢	40— 1.03	3-17-34
El Dorado East Field and Smackover	*.70			9-29-33
North Louisiana	29— .79	2¢	40— 1.08	9-29-33
Urania	*.85-*.87			1- 1-34
South Louisiana	Below			
Lockport	20— .80	2¢	34— 1.10	9-29-33
Iowa, Cameron Mds.	Below 20— .70	2¢	34— 1.00	9-29-33
Rocky Mountain States				
Salt Creek	29— .84	2¢	40— 1.08	9-29-33
Elk Basin	*1.17			9-29-33

*All gravities—flat rate.
†Gulf Coast prices as posted by Humble Oil & Refining Company.

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Sunburst	*1.35			9-29-33
Lance Creek	*1.02			8-25-33
Osage	*.62			8-25-33
Cat Creek	*.45			8-25-33
Ponders	*.65			8-25-33
Hog Back, N. M.	*1.00			9- 8-33
Lea County, N. M.	*.75			9-29-33
Mid-West States				
Lima	*1.15			2- 1-35
Illinois	*1.13			1- 5-34
Princeton	*1.13			1- 5-34
Western Kentucky	*1.13			5-22-35
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	17— .69	2¢	22— .84	9- 6-33
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	29— 1.09	3¢	30— 1.12	9- 6-33
Inglewood	14— .65	4¢	16— .73	9- 6-33
	17— .76	4¢	18— .80	9- 6-33
	19— .82	4¢	20— .87	9- 6-33
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	23— .97	4¢	24— 1.01	9- 6-33
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	16— .69	4¢	17— .73	9- 6-33
	18— .76	4¢	19— .80	9- 6-33
	20— .83	4¢	21— .87	9- 6-33
	22— .90	4¢	23— .94	9- 6-33
	24— .97	3¢	25— 1.00	9- 6-33
			26— 1.04	9- 6-33
Olinda-Brea Canyon	14— .65	4¢	16— .73	9- 6-33
	17— .76	3¢	28— 1.10	9- 6-33
Athens-Rosecrans Domingues	23— .83	3¢	24— .86	9- 6-33
	25— .90	4¢	26— .94	9- 6-33
	27— .97	3¢	29— 1.04	9- 6-33
	30— 1.08	4¢	31— 1.12	9- 6-33
			32— 1.15	9- 6-33
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	30— 1.09	3¢	34— 1.21	9- 6-33
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	26— .90	4¢	28— .98	9- 6-33
	29— 1.01	4¢	30— 1.05	9- 6-33
	31— 1.08	4¢	33— 1.16	9- 6-33
	34— 1.19	4¢	35— 1.23	9- 6-33
	36— 1.26	4¢	38— 1.34	9- 6-33
New Hall, McKittrick, Kern River	14— .57		19— .57	9- 6-33
Midway-Sunset, Elk Hills, Buena Vista Hills	17— .57	4¢	18— .61	9- 6-33
	19— .64	3¢	22— .73	9- 6-33
	23— .77	4¢	33— 1.17	9- 6-33
Lost Hills	17— .57	4¢	21— .73	9- 6-33
	22— .76	3¢	30— 1.00	9- 6-33
Coalinga	17— .57	1¢	18— .58	9- 6-33
	19— .62	3¢	21— .68	9- 6-33
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Eureka Pipe Line	*1.87			5-16-35
Buckeye Pipe Line	*1.77			5-16-35
Corning Grade	*1.32			10- 2-33
Michigan				
Central Michigan	*1.20			9-30-33
Muskegon	*.70-1.00			12-31-32
Canada				
Petrolia	*2.10			9- 9-33
Oil Springs	*2.17			9- 9-33

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Week Ending May 18, 1935

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Illinois	...	...	...	...	.....	8	5
Indiana	15	1	6	8	50	78	56
Kansas	25	12	....	13	5,460	547	307
Kentucky	...	...	...	...	.....	58	32
Louisiana	14	5	2	7	3,120	279	260
Michigan	13	8	3	2	670	152	159
Mississippi	2	....	1	1	.....	9	13
Montana	1	1	....	...	260	25	42
New Mexico	7	4	....	3	33,075	106	38
New York	...	...	...	...	.....	...	3
Ohio	8	4	2	2	15	531	317
Oklahoma	60	44	2	14	81,390	897	734
Pennsylvania	6	1	3	2	25	57	135
Texas	223	176	6	41	722,310	4,473	3,473
Utah	...	...	...	...	.....	.....	3
West Virginia	22	7	11	4	65	188	173
Wyoming	1	1	...	...	400	17	13
Totals this week	422	286	36	100	859,155	7,780	5,931
Totals last week	442	279	33	130	728,830	...	...
Totals this year	7,780	5,121	675	1,984	14,633,420	...	...

MAJOR PRICE CHANGES

	Penna. (Nat. Tr.)	Mid-Cont. (36 Gr.)	Calif. (26 Gr.)
March 5, 1933	.....	.....	Cut 24.
May 2, 1933	.....	Cut 19.	.....
May 9, 1933	Cut 20	.....	.....
May 22, 1933	Up 10.	.....	.....
June 19, 1933	Up 10.	Up 19.	.....
June 26, 1933	Up 10.	.....	Up 9-12
July 6, 1933	Up 13.	Up 10.	.....
July 17, 1933	Up 15.	.....	.....
July 28, 1933	Up 15.	.....	.....
August 11, 1933	Up 10.	.....	.....
August 24, 1933	.....	Up 10.	.....
August 30, 1933	Up 15.	.....	.....
September 6, 1933	Up 10.	Up 10.	Up 15.
September 8, 1933	.....	Up 15.	.....
May 1, 1934	Up 10.	.....	.....
November 6, 1934	Cut 25	.....	.....
December 6, 1934	Cut 25.	.....	.....
January 4, 1935	Up 15.	.....	.....
February 4, 1935	Up 15.	.....	.....
May 16, 1935	Cut 15.	.....	.....

CRUDE PRODUCTION TAXES

Oklahoma—Five percent of gross value less royalty interest.

Texas—Two cents or 2 percent, whichever is higher.

Louisiana—From four to 11 cents a barrel, depending upon gravity.

Arkansas—2.6 percent of gross market values.

Montana—Three percent of gross value at well and ½-cent per barrel.

Wyoming and New Mexico—Production tax based upon state and county assessments.

California—.66443 mills per barrel of oil produced and 17.39 cents per acre on proved oil lands.

Rio Grande Valley Pools To Receive Pipe Outlets

San Antonio, Texas.—Construction will commence immediately on several pipe line and refinery projects in the Rio Grande Valley district, giving outlet and market for several fields, now being hindered by lack of facilities. The several projects will involve an expenditure of between $1,500,000 and $2,000,000.

Ralph E. Fair and associates of Dallas, have made a contract with Sun Oil Company for its Cuevitas field production in northern Starr County, and will build a 22-mile four-inch line to Rio Grande City, where it will be loaded into tank cars for shipment via Missouri Pacific Railroad.

Part of the oil will be shipped to Rado Oil and Refining Company plant at McAllen. Fair et al bought controlling interest in this plant recently and are to immediately commence the enlargement and reconstruction of it to handle an additional amount of this type crude.

Fair and associates also are to construct a six-inch pipe line from the Samfordyce field in western Hidalgo County, to Port Isabel-Brownsville Port District.

B. F. Weekly et al recently announced plans for the immediate building of a six-inch line from this field to the same deep water port. Work will begin immediately on the construction of 80,000 barrels of storage in the Samfordyce field and another 20,000 barrels will be built at the terminus of the line. Surveying crews are already routing the proposed line. Associated with Weekley in this project are William McGinley of Dallas; O. R. Seagraves, Houston, and Edgar H. Stapper & Company, New York City.

The two pipe lines from Samfordyce to deep water port will be 85 miles long.

Ralph Fair and associates plan to construct a cracking plant near deep water to handle 1000 barrels of crude or more per day. This refinery project is in connection with the pipe line development, providing a market for the crude oil to be gathered from the several fields.

Sullivan City Oil & Refining Company's plant, just north of the Samfordyce field, is about 50 percent complete. It will handle oil out of the Rio Grande City field.

The deal for the Cuevitas field production with Sun Oil Company provides a much needed outlet. The company constructed a 110,000-barrel storage tank on the lease during the early development of the field and has been running oil into this tank ever since. The storage is now within a few inches of being filled. In addition, slightly more than 500 barrels of oil is being produced daily into the storage.

Plan Pipe Lines For Michigan Pool

Mt. Pleasant, Mich.—Simrall Pipe Line Company has started construction of a six-inch pipe line from the Crystal district in Montcalm County to the Roosevelt Oil Company refinery in Mt. Pleasant, 28 miles. Simrall is a subsidiary unit of the Roosevelt Oil Company.

Ben J. Skinner, head of the Mid-West Refining Company at Alma, announced plans to build a six-inch pipe line from the Crystal field to his Alma plant, about 13 miles.

May Build 165-Mile Six-Inch Line in East

Philadelphia, Pa.—Contracts may be awarded in the near future by Keystone Pipe Line Company, pipe line subsidiary of Atlantic Refining Company, for the extension of its gasoline pipe line system from Mechanicsburg, near Carlisle, Pa., to Pittsburgh, a distance of approximately 165 miles. The company is known to be considering the project, but officials state that nothing definite has been decided. Preliminary plans call for the use of six-inch welded pipe and it is believed that the line will be built this summer if at all.

The proposed extension would follow an almost due west route across the south portion of the state, and would involve the crossing of extremely rugged country due to mountains.

Seven new main line stations may be erected, supplementing those now in service along the company's 59-mile eight-inch carrier extending north from its refinery near Philadelphia to Montello junction; between the Montello-Carlisle 54-mile six-inch unit; and possibly four along the new unit.

R. C. Tuttle, Philadelphia, is vice president and general manager of Keystone Pipe Line Company. This transportation subsidiary of Atlantic Refining Company is under a separate management from Atlantic Pipe Line Company, which has extensive crude lines that serve East and West Texas and Southeastern New Mexico fields as well as in the east.

Completing California 88-Mile 10-Inch Line

Los Angeles. — General Pipe Line Company, subsidiary of General Petroleum Corporation, is completing its 88-mile 10-inch pipe line from the company's Lebec refinery to its pump station at Torrance. The new line, which involved the expenditure of approximately $1,000,000, will handle 40,000 barrels daily, but this rating may be increased to 60,000 barrels by the construction of an intermediate booster station. At present the line will be operated without a booster station, between Lebec and Torrance. The elevation of the line drops from 4200 feet at Lebec to only a few feet above sea level at Torrance. The company has developed increased production in the Los Angeles Basin and the new line will provide additional outlet.

Additional Construction Work for Houston Area

Houston.—Stanolind Pipe Line Company plans the construction of a lateral pipe line that will connect Pan America Refining Company's Texas City plant, south of Houston, with its East Texas crude oil line. The line will be several miles long, and a survey was commenced the past week. Storage tanks also are to be erected. Both companies are subsidiaries of Standard Oil Company of Indiana.

Stanolind Oil & Gas Company, producing subsidiary, with considerable holdings in the Mykawa and Friendswood-Hastings area, also south of Houston, plans to do considerable construction work at South Houston, which is to be made field headquarters for the two districts. Approximately 60 employees' homes will be built at South Houston.

SCOUTS
(*Continued from page 12*)

Company, San Antonio, second vice president; Dwight L. Becker, Amerada Petroleum Corporation, Houston, chairman executive committee; Howard Boyd, Magnolia Petroleum Company, Dallas, secretary-treasurer.

All meetings were held at the Plaza Hotel, headquarters. The first business meeting opened the morning of May 20, with an address of welcome by Dr. H. R. Giles, mayor. J. Elmer Thomas, of San Antonio, an independent operator, discussed electrical resistance measuring device for rotary drill. He was assisted by J. C. Karcher, of Geophysical Service, Inc., Dallas. Fred P. Shayes, geologist, United Production Corporation, Beeville, discussed the application of electrical logging device information in correlating South Texas wells. W. F. Knode, Southern Minerals Corporation, Corpus Christi, outlined the latest discoveries in South Texas and commented on their possibilities. Gun perforating and its uses was the subject of W. G. Lane, of Lane-Wells Company, Los Angeles.

Golf, swimming, baseball, bridge and barbecue, etc., were enjoyed by both the men and ladies during the afternoon, La Quinta Club being the site of the entertainment. A boat ride into Corpus Christi bay on the Japonica was the entertainment for the evening.

Tuesday morning, May 21, was occupied by a general business session and election of officers.

Tuesday afternoon's entertainment included a golf tournament for the men and bridge for the ladies. An informal dinner dance on the Plaza Hotel Deck closed the meeting. A number of trophies were awarded to the winners of the golf tournament at that time.

BOYD
(*Continued from page 12*)

amount of oil necessary to meet demand, and federal control over crude oil imports.

The petition urged that industries be permitted to set up voluntary pacts or agreements to eliminate unfair methods of competition. It was asked that the petroleum industry be subjected to no special federal intervention with its marketing operations. Finally, the petition asserted that "any such economic strait jacket as is contained in Senate 2445 (the Harrison Bill), or similar proposals for the enlargement of the NIRA, would serve to increase the price of gasoline and demoralize the industry."

Asserting his right, as a Democrat, constructively to criticise certain policies of the political party now in power, Mr. Boyd denounced the attempts of theorists to set up a new economic system and to destroy state sovereignties. He asserted that proposed laws now being written by "theorists inflamed with the policies of Moscow," would reduce state governments to the status of territories or provinces and make the American constitution so elastic as to cover every proposed scheme for centralization of power at Washington.

Mr. Boyd outlined a proposed scheme for combining the states, under federal control, into eight "departments." Governors would be responsible to Washington. All state authority except over education, sanitation, and fire and police protection would be taken by the federal government. Under this plan, he said, Texas, Oklahoma, New Mexico, and Arizona would constitute the "Department of the Southwest."

Franklin Calls Meeting Of All Oil Associations

Tulsa.—Wirt Franklin, president of the Independent Petroleum Association of America, issued a call on Thursday, May 23, for a meeting of interested oil associations to be held in Washington, D. C., on Tuesday, May 28. The following message was sent in announcing the call:

"In view seriousness legislative situation including extension NIRA and permanent oil legislation I am calling conference interested oil associations Washington Tuesday, May 28, at Mayflower Hotel 10 A.M. I suggest your organization send two to five authorized representatives to participate in formulating program for committee to present to president. Please advise me Independent Petroleum Association of America office nine four two Investment building Washington whether expect your representatives. Suggest your representatives bring information number members your association in case needed." Wirt Franklin. Franklin has been ill at his home in Ardmore, Oklahoma, for several weeks and issued the call from that point.

Victoria County

San Antonio, Texas.—Plummer Drilling Company's J. Zimmer 4, Coleto Creek field, Victoria County, is in process of completion at 2832 feet. It has sand at 2830-32 feet with casing set at 2826 feet. Trans-State Oil Company's Kanster 1, west outpost for the field, has commenced drilling.

Spanish Monopoly Fails To Realize Expected Profit

The Spanish petroleum monopoly (Compania Arrendataria del Monopolio de Petroles, S. A.) did not experience as profitable a year in 1934 as the directors anticipated, according to the chairman's report before the stockholders of that company recently.

Due to lower freight rates, the operation of the company's fleet showed a loss of 3,038,316.33 pesetas. Also calculated as a loss was the depreciation of 4,412,457.03 pesetas on the fleet.

Contribution to the government in 1934 amounted to 258,054,446.47 pesetas. There was available for distribution at the end of 1934 a profit of 22,025,894.99 pesetas, a part of which was a balance carried over from 1933.

The annual report of the chairman of the monopoly claims that the Spanish government benefited in 1934 by 77,510,201 pesetas which would not have been collected in the free market which existed prior to the establishment of the monopoly. This figure is the difference between 258,054,447 and 180,544,245 pesetas—the latter amount being the revenue which would have been obtained from the custom charges on petroleum products had the monopoly not been adopted.

However, the latter figure is obtained by using the duty rate in effect prior to the inauguration of the monopoly of 1927. There is some doubt as to whether the 77,510,202 pesetas is a true figure, as import duties on practically all other commodities have been increased, and, if the rates on petroleum products had been increased proportionately, this figure would have been greatly enlarged resulting in a much smaller profit to the government.

In other words, if the taxes on petroleum products had been increased in proportion to other taxes, it is reasonable to conclude that the government would have received as much or more in a free market than under the monopoly.

Shell Sews Up German "Lube" Export Business

Latest annual figures available indicate that subsidiary organizations of the Shell interests in Germany are exporting 85 percent of the lubricating oil exported from that country.

According to figures made available by Deutsche Bergwerks-Zeitung, Germany now occupies fourth rank as an exporter of lubricating oils, notwithstanding her low rating as a producer of crude petroleum.

Program Announced For Eastern A.P.I. Meet

Pittsburgh.—Ample provision has been made for general discussion of subjects dealing with the production of oil by the several methods used in the East in the program of the Eastern District Division of Production, American Petroleum Institute, to be held here Wednesday and Thursday, June 6-7. Sessions will be at the William Penn Hotel.

Wednesday, June 5

10:00 A. M.—Opening session.

Chairman—J. H. Newlon, superintendent of production and geologist, Equitable Gas Company.

Address of welcome—Dr. J. French Robinson, vice president, Peoples Natural Gas Company.

Remarks — C. A. Young, secretary, American Petroleum Institute.

10:30 A. M.

Presiding—S. W. Meals, president, Carnegie Natural Gas Company.

"Is there any future for the now-drilled Eastern oil production under natural or standard producing methods?"—P. H. Curry, president, South Penn Oil Company.

Discussion by L. L. Tonkin, vice president, Hope Natural Gas Company; A. E. Faine, Ohio Grade Crude Oil Association; J. E. Moorehead, executive secretary, Pennsylvania Crude Oil Association; Don Wilson, Columbia Gas & Electric Company.

Luncheon 12:00 to 1:00 P. M.

1:30 P. M.

Presiding—J. H. Newlon, superintendent of production and geologist, Equitable Gas Company.

"Symposium on details of oil and gas recovery by artificial means and the practical factors determining the possibility of applying artificial recovery methods to oil or gas properties."—H. R. Pierce, consulting engineer.

Discussion by Dr. A. W. Gauger, director, Dr. G. L. Hassler and Dr. Sam Yuster, Mineral Industries, Penn State; Cornell Pfohl, Kendall Refining Company; C. C. Hogg, vice president, National Petroleum Company; Clarington Streeter; H. H. Phillips, T. W. Phillips Gas & Oil Company; J. Bird, Hanley and Bird Company; H. J. Little, South Penn Oil Company; Dr. H. C. George, head, Oil and Gas Department, University of Pittsburgh; Dr. Chas. R. Fetke, professor in geology, Carnegie Institute of Technology; R. A. Cattell, chief technologist, Petroleum Division, Bureau of Mines; Ralph Zook, Sloan and Zook; Forest Dorn, Forest Oil Company; Wilson K. Page, Olean Petroleum Corporation; Jack Gaddess, geologist, Allegheny Gas Company; Paul D. Torrey, geologist; C. A. Bonnie, head, Department of Petroleum, Penn State College.

7:00 P. M.

Annual stag dinner and entertainment. Toastmaster—F. F. Schauer, vice president and general manager, Equitable Gas Company.

(*Continued on page 55*)

Good Grayson Pool Well Is Completed

Seminole, Oklahoma. — In the new Grayson pool of southwestern Seminole County, Gypsy Oil Company completed Grayson 2, NW SW NW 13-6n-5e, flowing at the rate of approximately 50 barrels per hour from 3813 feet. Simpson Dolomite was encountered at 3745 feet and at 3803 feet the well swabbed 321 barrels of 34 gravity oil in 24 hours, deepening to 3810 feet and flowed 904 barrels of 36 gravity oil in nine hours. It was shut in for potential gauge.

Chandler Wildcat Is Plugging Back

Chandler, Okla.—Stanolind Oil & Gas Company et al's Campbell 1, SW SW NW 3-14n-3e, wildcat test 1½ miles west of the West Chandler pool, was to shoot the casing at 5139 feet after finding water in the lower part of the upper Simpson. This test topped the Simpson at 5054 feet, had showing of oil from that depth to 5072 feet and first water from 5072 to 5075 feet.

Fox Pool Deep Test in Viola Lime

Ardmore, Okla.—Carter Oil Company was drilling below 5917 feet in Viola lime in Williams 1, SW NE SW 27-2s-3w, deep test in the old Fox field of northwestern Carter County. This test, which may be carried to 10,000 feet, is encountering very thick sections of all beds from Hunton lime down to the present depth. Top of the Viola is not available but something over 100 feet have been penetrated.

Enid, Oklahoma. — Helmrich and Payne were again under way after considerable hard luck at Crouse 1, C NE SW 29-25n-8w, 18 miles northwest of here in southwestern Grant County. Late in the week it was reported drilling below 6210 feet, still in Mississippi lime topped at 5805 feet. Nearest production is in the Garber pool 31½ miles to the southeast. It is located on a seismograph "high" in the Western Oklahoma Basin area.

Fitts Potential Case To Be Heard June 4

Oklahoma City.—The Oklahoma Corporation Commission has set for hearing on June 4, the application of Miller, King, Amos and Delaney for approval of potential on their George E. Smith 1, Section 26-2n-6e, extension well in the southwestern portion of the Fitts pool of southeastern Pontotoc County. This is one of the unusual cases to come before the commission and involves a point which has not heretofore been considered in the matter of taking potentials for proration purposes.

This well was completed on May 12, 1935, at which time representatives of the owners of offset leases witnessed the hourly gauges taken through tubing as required by the commission. Under the regulations such gauges must be witnessed by a representative of the commission and signed by owners of offset properties before the official rating can be made. Hourly gauges through 4320 feet of 2½-inch, inside diameter externally upset tubing were as follows: 490, 438, 420, 404½, 415, and 402½ barrels, respectively. Pressure tests taken at 2000 feet, 2500 feet, 3000 feet and 3407 feet and the results thus obtained extrapolated to a minus 3300 feet and upon the computation thus made, indicates a pressure of 1804 pounds per square inch at minus 3300 feet. At conclusion of the tests representatives of offset well owners refused to sign the gauges and the commission refused to accept the potential which would be 9840 barrels per day through tubing. It is the contention of observers of the test that with 1804 pounds formation pressure, 2½-inch tubing as used in the well would not handle the flow as shown by the gauges and that the tubing is split. Owners of the well were asked to replace the tubing but declined to do so until a hearing was had.

The petition also asks for an adjustment of allowable on the basis of acreage. The well in question is located in the center of a tract containing approximately 13 acres, making it 468 feet from the property line, whereas the offsets are center of 10-acre locations 330 feet from the line. Adjustment is asked in the relation that 13 acres bears to the 10-acre unit, established by the corporation commission for the Fitts pool.

JOHN FITTS, prominent Ada geologist, and W. A. Delaney, Jr., one of the discoverers of the Fitts pool, were principal speakers at the first program held by the Tulsa Chapter, American Petroleum Institute, on Wednesday evening, May 22.

Big Well Extends Edmond One Location Westward

Edmond, Oklahoma.—The Edmond pool four miles west of here received a one-location westward extension during the week when Stanolind Oil & Gas Company and Amerada Petroleum Corporation's Suenram 2, NW NW NE 6-13n-3w, flowed 2656 barrels in five hours and 22 minutes, a rate of flow which would give it a rating of 11,877 barrels in 24 hours. Production is from second Wilcox sand topped at 6610 feet and drilled to 6718 feet. Hourly flows were as follows: 422, 471, 529, 553, 508. It was estimated to be making 14,000,000 cubic feet of gas.

Meager reports which have come from Gulf Production Company of Oklahoma's Hathaway 1, slightly over a half-mile to the southwest indicated that the dip is very rapid in that direction. Correlations on Suenram 2 on top of the Wilcox sand show the well to be only 21 feet lower than Suenram 1, east offset owned by the same operators.

Slick Urschel Oil Company's Suenram 1, NE NW NE 6-13n-3w, west offset to the new Stanolind-Amerada well, topped Viola lime at 6379 feet, drilled Simpson from 6409 to 6418 feet and was waiting on cement to set. Correlated on top of Viola lime it is 34 feet lower than Suenram 2.

In the northern portion of the pool Continental Oil Company was drilling below 4785 feet in Young 2, NE SE NW 31-14n-3w; Pure Oil Company was drilling below 4490 feet in Malm 1, SE SE SW 30-14n-3w; Marathon Oil Company was drilling below 5290 feet in Dahl 4, NW NE SE 31-14n-3w and at Dahl 5, SW SE SE 31-14n-3w, drilled to 6406 feet, set 6⅝-inch pipe at 6355 feet and was waiting on cement to set. Marathon had another well nearing completion with Dahl 1, Account 2, NE NE SW 31-14n-3w, waiting on cement to set after running 6452 feet of 6⅝-inch casing with total depth at 6484 feet. Mid-Continent Petroleum Corporation's Young 3, SW SE NE 31-14n-3w, was drilling below 6300 feet and Young 4, NW SW NE 31-14n-3w, below 5525 feet after topping Checkerboard lime at 5405 feet.

Five miles north of the town of Edmond, Gypsy Oil Company was shut down for orders at Schock (Mitchell) 1, NW SW SW 2-14n-3w, after topping second Wilcox sand at 6448 feet and coring from 6450 to 6456 feet, recovering four feet of salty sand. It correlates 112 feet lower than Sinclair Prairie Oil Company et al's Koatsch 1, SW SW SW 23-15n-3w, five miles to the north.

Sinclair Prairie Oil Company's Corbett 1, NE NW NE 17-1n-3w, two miles southeast of production in Edmond pool, topped Oread lime at 4355 feet and was drilling below 4950 feet. This test is on a seismograph and subsurface "high" on the Nemaha granite ridge trend.

In the same area, 1¼ miles north of the town of Britton, Slick-Urschel Oil Company et al encountered Checkerboard lime at 5795 feet and was drilling below 5885 feet in Owen Community 1, SE SE SE 19-13n-3w. This also is a seismograph and subsurface "high" on the same trend.

Oklahoma Activity Shows Material Increase

Tulsa.—New work in Oklahoma increased more than 100 percent during the week and completions jumped to a high percent of success when 49 first reports were made, and 46 out of 60 completions resulted in either oil or gas production. As has been the case for several months Pontotoc County, under the influence of the Fitts pool, led the state in new work with 12 first reports; Osage County had six; Creek, five; Oklahoma, four; Carter,

Oklahoma Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CADDO COUNTY—		
English Drlg. Co., McKenna 3, ne sw se 11-5n-9w	*	3900
CARTER COUNTY—		
Cox & Hamon, Farm 2, nw ne se 17-2s-2w	350	2166
Skelly, Pierce B 2, nw sw ne 17-2s-2w (pb 1851)	12	2569
Schermerhorn Oil Co., Smith 13, sw se sw sw 5-4s-3w	25	1095
Shell, Wirt Franklin 49, ne se nw ne 8-4s-3w (pb 1084)	50	1090
Wirt Franklin 50 sw se ne ne 8-4s-3w	5	1025
Wirt Franklin 51, nw sw ne ne 8-4s-3w	104	1077
COTTON COUNTY—		
Shasta Oil Co., Branson 1, nw nw se 30-1s-10w	*	2510
CREEK COUNTY—		
Bay State Oil Co. et al, Mike 2, ne sw nw 10-17n-8e	60	1387
Crosbie,Lacey 2, sw sw nw nw 22--8n-8e	75	2635
Swift et al, King 3, sw sw se sw 7-18n-10e	30	2326
Tulsa Oil Co., Allen 1, ne ne nw sw 12-19n-9e	*	2728
JACKSON COUNTY—		
Gypsy, Circle 1, nw nw nw 11-1n-20w	27	1570
JEFFERSON COUNTY—		
O. V. Beck, W. & D. Seay 6, nw se nw se 34-6s-5w	*	2220
Farlyn Oil Co., Seay 31, sw se nw se 3-7s-5w	16	1242
KAY COUNTY—		
Bay Oil Corp., Miller 1, nw nw se 15-28n-3e	*	3144
LOVE COUNTY—		
Amerada & Stanolind, Westheimer & Daube 1, nw se se 27-6s-2e (pb 700)	*	1872
MARSHALL COUNTY—		
Newsome, Fee 2, nw ne se 36-7s-5e (pb 495)	5	661
OKFUSKEE COUNTY—		
Dardorff, Fields 2, ce½ se nw 14-10n-11e	*	2183
OKLAHOMA COUNTY—		
Gulf Pet. Co., Lindsay 3, ne nw sw nw 6-13n-3w	*	lcn.
Lindsay 4, ne sw nw nw 6-13n-3w	*	lcn.
OKMULGEE COUNTY—		
Steiger & Hazlett, Fields 3-A, nw se ne ne 33-12n-14e	¶1/5	680
Campbell et al, Smith 2-A, se sw se ne 27-14n-13e	10	1980
J. L. Selby, Thompson 3-A, cwl ne nw 6-14n-15e	5	1529
Jordan Brothers, Miracle 1, nw sw sw nw 31-15n-13e	*	2184
Summers, Roe 10, e½ se nw nw 16-15n-14e	8	843
Delaney, Larney 3-A, ne ne sw nw 28-15n-14e	15	1683
OSAGE COUNTY—		
Norbla Oil Co., 1, nw nw sw sw 4-20n-10e	*	282
Barnsdall, 28, sw sw ne 30-21n-9e	33	333
Pure, 5, ne ne ne 25-2n-7e (pb 3000)	75	3045
Champlin, 9, nw se nw 16-2n-7e	152	2635
Continental, 12, se sw se ne 21-24n-7e	417	2664
5, ne nw ne se 21-24n-7e	205	2664
George Labodie et al, sw sw ne 14-24n-8e	175	1956
Peters & Norbla Oil Co. 1, sw sw se 15-25n-5e	*	3215
Alexander et al, 3, cel se 35-25n-11e	125	1697
Lewis Prod. Co., 1, ne ne ne sw 23-26n-6e	35	3004
PONTOTOC COUNTY—		
Phillips, Norris 7, nw ne sw 25-2n-6e	22,200	4325
Delaney, Smith 1, ne se se 26-2n-6e	10,392	4320
Amerada, Smith 1-A, cs½ nw 28-2n-7e	¶30	1697
Carter, Richards 11, se sw se 30-2n-7e	3228	4072
Deep Rock, Hardin 3, ne se ne 30-2n-7e	5978	4270
Carter, Smith 1, nw ne ne 31-2n-7e	8309	3977
Moore et al, Patrick 1, nw nw ne 31-2n-7e	9240	4093
Patrick 2, ne nw ne 31-2n-7e	6864	4010
Atkins 1, nw nw nw 32-2n-7e	9384	4048
Senora O&G Co; Gilmore 2, ne se ne 22-5n-8e	30	827
POTTAWATOMIE COUNTY—		
Blackwell Oil Co., Neil 1, nw se sw 4-5n-3e (pb 2600)	25	4212
Mid-Continent, Schrader 1, nw nw ne 6-6n-5e (otd 2863)	65	4032
Magnolia, Jones "B" 2 ne nw ne 18-7n-4e	211	3963
Iglehart, Rauch 1, ne ne sw 20-9n-5e (pb 4168)	55	4174
Howard Sherman et al, Wingo 1, ne nw se 32-10n-5e (pb 4356)	*	4394
SEMINOLE COUNTY—		
Mid-Continent, Harjoge 4, sw sw se 31-7n-8e	2828	4235
Sinclair Prairie, Campbell 9, se nw ne 6-9n-6e (otd 4396)	8	4204
Carter, Porter 1, cw½ sw ne 18-10n-6e	480	4587
STEPHENS COUNTY—		
Mudge Oil Co., Woods 39, ne se nw 26-1s-5w	5	719
Johnson & Davison, Schick 3, sw sw nw ne 27-1s-8w	6½	1975
WAGONER COUNTY—		
C. M. & G. 6, sw ne se nw 2-17n-15e.	15	1080
White Rose Oil Co., Porter 3, ne ne sw nw 14-17n-15e	55	1160
Knox & Shouse, Chisson 1-A, ne ne ne ne 15-17n-15e	*	1165

*Failures; †Junked; ¶Mil. cu. ft. gas.

Seminole, Stephens and Tulsa, three each; Lincoln and Noble, two each; and Greer, Hughes, Logan, Marshall, Pottawatomie and Wagner Counties, one each.

Fitts was also an outstanding leader in new production with eight oil wells yielding a total calculated initial of 75,595 barrels of the 81,393 barrels for the state, and one gas well with initial volume of 30,000,000 cubic feet. One other gas well rated at 200,000 cubic feet, two abandoned locations and 12 dry holes brought the drilling record to 136,266 feet, of which 1169 feet were in one old well and 6266 feet in two wildcat dry holes.

Gypsy Increases Northwest Oklahoma County Holdings

Edmond, Oklahoma.—Gypsy Oil Company has purchased from Indian Territory Illuminating Oil Company a one-half interest in 800 acres lying in Sections 11, 12 and 13-14n-4w, the center of which is approximately four miles directly northwest of the Edmond pool and along the Nemaha Ridge trend in northwestern Oklahoma County. The deal is reported to involve some cash and a free well with acreage owned by Continental Oil Company expected to be placed in a community block which Gypsy will test and operate if production is found.

Five Tribes June Lease Offerings Largest in Years

Muskogee, Okla.—Love and Haskell Counties will be featured in what is to be the largest oil and gas lease offering in several years by the Five Civilized Tribes in a public auction to be held here on Thursday, June 6 at 10:00 a. m. A total of 237 tracts in 26 counties comprise an offering of 20,463.44 acres. Love County leads the list with 2,821.72 acres in 34 tracts and Haskell County will be second with 2,172.86 acres in 28 tracts. In seven other counties over 1000 acres are to be offered in each. In addition there will be offered a coal and asphalt lease on five acres in Muskogee County and a mineral lease on 20 acres in Rogers County.

Use of Vacuum Barred at Healdton

Oklahoma City.—The Oklahoma Corporation Commission has issued an order forbidding the pulling of vacuum on any well in the old Healdton pool of northwestern Carter County. The order resulted from a hearing held several weeks ago when several operators presented the request for the use of vacuum equipment. From the evidence it was adduced that application of vacuum should be prohibited or allowed to all operators alike but that a majority of operators opposed the practice. It was stated that ultimate recovery of oil would be greater by the use of other methods and that probable increase in flow probably would not justify the expense of vacuum equipment. The Healdton pool has been producing continuously since 1913 and is rated as one of the greatest producing areas in the state.

Canadian County

El Reno, Oklahoma.—R. Carl Larkin's Provene 1, NW NW NE 33-13n-5w, three and one-half miles north of the town of Yucon, in eastern Canadian County, was drilling below 6745 feet. Correlation on the upper horizons indicated the test to be nearing Oswego lime.

Rains and Floods Slow Field Work in Kansas

Wichita, Kansas.—Kansas developments from a highly successful week to one of mediocrity when 27 first reports were made and 12 out of 25 completions were dry holes. Russell County continued to be the most popular spot in the state with 10 first reports; Butler and Ellsworth, had four each; Rice, two; and Barton, Lyon, McPherson, Pratt, Reno, Rush and Stafford Counties, one each.

Twelve oil wells were given an initial rating of 5458 barrels, the lowest point reached this year; one location was abandoned and 12 tests were dry. Of the 59,119 feet of hole completed, 117 feet were in three old wells and 9841 feet in three wildcat dry holes. Activities during the week were considerably handicaped by heavy rains and impassable roads in many sections of the state, so the week is not representative of a trend.

Russell County

Russell, Kansas.—Skelly Oil Company made a nice addition to the Hall-Miller pool of south central Russell County when it completed Opdycke 1, SW SW SW 29-14s-13w, pumping 1101 barrels in 18 hours. Top of Gorham sand was found at 3125 feet and first oil from 3130 to 3131 feet. Total depth is 3136 feet still in sand.

Reno County

Hutchinson, Kansas.—Gypsy Oil Company's Frank Tonn 1, SW NW SE 16-25s-4w, wildcat test 12 miles southeast of here in southeastern Reno County, topped Mississippi chat at 3573 feet, drilled to 3577 feet and was circulating preparatory to running casing. It will be completed with cable tools.

Stafford Discovery Flows 840 Barrels

St. John, Kansas.—Lario Oil & Gas Company et al's Tudormorgan 1, SE SE NW 23-24s-13w, discovery well three miles southeast of here in south central Stafford County, made 840 barrels in 24 hours on potential gauge and was cutting one percent basic sediment and water from 3628 feet, the total depth. Production is from the Kansas City-Lansing series topped at 3508 feet.

Kansas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARTON COUNTY—		
Sharan, Kempler 1, se ne ne 31-18s-11w	*	240
BUTLER COUNTY—		
Morgan & Buffington, Schumacher 1, nw sw se 12-25s-4e	lcn.	abd.
Roth & Farrout, Unger 1, ne nw sw 30-26s-6e	*	3165
CHAUTAUQUA COUNTY—		
Griffin & Bell, Oliver 10, sw nw se 1-32s-10e	30	1650
COWLEY COUNTY—		
Lewis Prod. Co., Pierce 5-B, se ne se 30-31s-6e	70	2945
ELK COUNTY—		
Jones et al, Walker 4, se se se 5-13s-10e	10	1635
ELLSWORTH COUNTY—		
Empire, Rolfs 2, sw se ne 14-17s 9w	1398	3187
GREENWOOD COUNTY—		
Mullendore et al, Tedroja 1, nw nw sw 14-23s-11e	*	2136
HARVEY COUNTY—		
Wentzel, Schrag 1, nw nw se 24-22s-3w	*	800
McPHERSON COUNTY—		
Carey & Texas Co., Holt 3, sw sw se 13-19s-2w (otd 3403)	*	3475
Youker, Gratton 1, se sw sw 24-19s-2w (otd 3422)	*	3455
W. C. McBride, Mugler 1, se sw sw 22-20s-3w	*	3321
PAWNEE COUNTY—		
Atlantic, Slepake 1, cne ne 15-23s-17w	*	4384
RENO COUNTY—		
Olson & Shell, Krehbiel 5, se se nw 26-23s-4w	809	3583
Uogh 3, sw sw ne 26-23s-4w	415	3595
Shell, Hoskinson "A" 1, sw sw se ne 9-24s-4w (pb 3340)	60	3950
RICE COUNTY—		
Magnolia, Byers 3, se sw nw 21-19s-9w	957	3239
Nye et al, Brown 1, nw se nw 10-21s-6w	*	3513
RUSSELL COUNTY—		
Aylward et al, Holland 3, se ne ne 28-13s-14w (otd 3311)	*	3323
Hartman & Blair, Ruson 1, nw nw nw 34-13s-14w	130	3315
Hutchinson Oil Co., Clark 1, nw nw nw 3-14s-14w	*	3311
Bridgeport Machine Co., Witt 1 nw nw sw 3-14s-15w	1136	3105
Texas Co., Gurney 1, sw sw ne 23-14s-14w	167	3048
Anschutz 1, nw nw sw 1-14s-15w	276	3083
WOODSON COUNTY—		
Elbar Oil Co., Figge 4-B, ne se sw sw 27-23s-14e	*	1797

*Failures; †Junked; ¶Mil. cu. ft. gas.

East Texas Completions To Exceed 5000 for Year

Tyler, Texas.—Averaging about 15 new wells daily the past week, the East Texas field is definitely headed for a more active development program. Volume of drilling permits approved each week by the Texas Railroad Commission indicates that the field will in all probabilities complete in excess of 5000 wells this year, a forecast advanced at the start of the year.

Independent companies, holding about 37 percent of the productive acreage, are setting the pace in completing new wells, having added 55 of the 104 reported the past week. This group has an average well density of about one producer to five acres, while 14 major companies, operating 63 percent of the oil area, have one well to about eight acres. The majors are losing ground in their renewed efforts to attain a more uniform well density, and at the same time suffer from unequal drainage.

Eight of the new completions failed to register natural flow upon completion the past week. Four were equipped for pumping, while three were swabbed, and one was tested for initial gauge on gas lift.

The most recent important extension to production along the northwest flank of the structure in Upshur County was scored by Ben G. Barnett, Houston, and others' O. J. Phillips 1, SEc of 100-acre lease, P. Whitstone Survey, flowing 50 barrels hourly by heads. The well cored two feet in the sand, topped at 3695 feet, or 3321 feet sub-sea, according to reports made to the railroad commission. This outpost is about 1280 feet north by east of Daisy Oil & Gas Company's B. F. Phillips 1, a failure drilled in October, 1931. A crooked hole in the latter was probably responsible for it having failed to make a producer.

Bids Received on Texas State Lands

Austin, Texas. — Bids on submerged state lands and public free school lands were received last week by State Land Commissioner J. H. Walker.

The Texas Company bid $672.74 plus ⅛ royalty for S. F. 10668, T. E. Douthit Survey in Brazoria County, which includes 104.3 acres.

Bids on three tracts in Calhoun County were received from Smith and McDonald. A bid of $523.60 and ⅛ royalty was offered for tract 3, consisting of 385 acres; for tract 4, which included 410 acres, $1049.60 was offered, together with ⅛ royalty; $1,062.40 plus ⅛ royalty was offered for Tract 5.

Stanolind Oil & Gas Company entered two bids for tracts in Harris County. Crystal Bay tract of 471 acres brought an offer of $7,071 plus ⅛ royalty, and an additional payment of $14,142 out of ¼ of ⅞ of the first oil produced. For a tract of 339.7 acres in Peggy's Lake, the company offered $5,095.50, ⅛ royalty, and $10,191 out of ¼ of ⅞ of the first oil produced.

H. C. Bishop bid $1725 and ⅛ royalty for 1150 acres which is submerged land in Sabine Lake and the Neches River.

Texas Cities May License Filling Stations

Austin, Texas.—A new precedent has been established by the Texas Supreme Court in a decision handed down in the Fort Worth filling station case.

The court held that the city had the unquestioned right, under its police powers, to require filling stations to be licensed, and to charge a fee for such a license.

The suit was brought to test the validity of a Fort Worth ordinance making such a requirement, the plaintiffs contending that the fee was in effect an occupation tax, which may not be levied by a subdivision of the state.

It is possible that similar ordinances will soon be established in other Texas municipalities. Houston already announcing its intentions to charge something like $25 per year.

Several East Texas Properties Change Hands

Tyler, Texas.—Undisturbed by the refusal of major companies to make purchases of properties in the East Texas field at prevailing prices, independent companies and individuals continue to consummate deals among themselves involving substantial cash consideration per well.

Sultana Oil Corporation, Shreveport, is credited with having purchased Lawrence S. Flannery, Inc.'s M. T. Cole 10.01-acre lease, E. M. Bramlett Survey, Gregg County, with three wells, for $110,000 cash, plus an oil payment of $21,277.70. The property is south of the Sabine River, and the wells were drilled to a sub sea depth of 3300 feet.

Joe Long Drilling Company, Longview, sold 20-acre lease out of its W. W. Owens property in the southwest corner of the C. P. Herford Survey, northeast Gregg County, to Travis & Wair for $2500 cash; plus $1000 cash bonus for each of five tests slated to be drilled; and $20,000 payable from production.

H. J. Wilder and associates recently paid $120,000 cash for Farrell & Company's S. E. Brox 20-acre lease, Thos. Grace Survey, north Rusk County, with two flowing wells.

I. K. Ricketts, superintendent of production for Amerada Petroleum Corporation in East Texas, standing on swinging cable foot bridge built by the company across the Trinity River so lease men can reach its well on the Freestone County side of the Cayuga field during flood stage of the stream. Ricketts resides at Gladewater.

East Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
JOINER AREA—		
Atlantic, C. Young 2-A (7½-ac)	7200	3731
Bateman O&G Co., W. H. Worrell 4 (48.34-ac)	360	3650
W. E. Brown & J. D. Hancock, L. Leath 1 (52-ac)	10	3648
W. H. Gant-Garvin & Wegner, W. P. Moore 18 (70-ac)	1000	3590
Gulf, T. B. Cashen 11 (127.7-ac)	7500	3816
Haynes Oil Corp., C. Lee 15 (73.6-ac)	8000	3632
HB&W Oil Co., Minnie Elliott 2 (63.66-ac)	80	3660
Humble, O. R., Holt 6 (41¼-ac)	9000	3793
H. A. Piercy 15 (138.34-ac)	8000	3739
J. W. Turner 31 (286.52-ac)	10,000	3774
Hunt Prod. Co., R. W. Fair 21-C (211.4-ac)	10,000	3622
Hunt & Joiner, D. Bradford 13-B (98.15-ac)	750	3722
Illinois Oil Co., Mayfield-Shell 28 (197.1-ac)	4500	3816
Alex McCutchin et al, J. R. Irion 3-A (10-ac)	5500	3754
G. Moore 1-C (15-ac)	5600	3866
McMurray & Fair, Inc., R. W. Fair 7 (20-ac)	9600	3654
Magnolia, Irion-Wright 28 (166-ac)	9800	3705
Marathon, M. M. Cross 71 (814.84-ac)	6000	3622
W. T. Grissom 81 (842.7-ac)	7500	3639
W. T. Grissom 82 (842.7-ac)	8000	3644
Jim Lunsford 9 (70.3-ac)	7500	3714
Ortiz Oil Co., E. E. Moores 1	6500	3694
Restal Drl. Co.-E. C. Laster, J. P. Maxwell 6 (18.53-ac)	1200	3614
Joe Sanders et al, C. C. Cooper 1 (72-ac)	50	3610
Shell, H. Brooks 13-A (176.4-ac)	3600	3740
Sun, H. A. Pace 12-B (637.45-ac)	5000	3798
Texas, J. W. Turner 9 (70.68-ac)	7000	3795
R. G. Trippett & A. H. Meadows, Thompson 3	7600	3810
Venable Oil Co. & McClanahan, Birdwell 35 (147.04-ac)	11,000	3635
Ward Oil Corp., E. S. Thrash 28 (200-ac)	7200	3802
Wheless Oil Corp., Geo. Patterson 5 (172.64-ac)	1500	3708
KILGORE AREA—		
J. S. Abercrombie-Harrison Oil Co., Brightwell 3-B (15-ac)	9500	3706
Atlantic, M. B. Hughey 12-B (100-ac)	9600	3580
Bay Oil Corp., W. P. Moore 11 (106.63-ac)	7600	3758
Carroll et al, T. A. Hendricks 1, blk 154	900	3610
C. A. Everts Drl. Co., J. H. Laird 5 (12-ac)	9000	3603
Gulf, R. N. Brightwell 8 (50-ac)	7500	3595
W. Florence 17 (165.09-ac)	8500	3691
S. Hilburn 84-B (274.32-ac)	7800	3597
T. L. Reeves 10 (78.7-ac)	7200	3594
C. Strong 14 (137.3-ac)	6000	3702
J. B. Watson 15 (92.97-ac)	7500	3542
H. C. Hensley et al, M. J. Register 3-A (3.6-ac)	4500	3688
Humble, C. H. Hedge 2 (51¼-ac)	100	3594
S. S. Laird 33-A (230-ac)	3600	3708
J. N. Peterson 31 (222.1-ac)	9200	3684
C. J. Julian O&Roy. Co. (J. W. Harreld, Rec.), England 6 (30-ac)	4500	3572
Magnolia, Marvin Andrews 7 (54.36-ac)	8800	3645
Grif Davis 9 (25-ac)	8400	3651
Nancy Radford 10 (75.05-ac)	9500	3647
Navarro Oil Co., R. N. Brightwell 24 (113.08-ac)	8500	3655
Geo. Prendergast et al, D. Beall 3 (8-ac)	10,000	3564
Yandell Rogers et al, Wm. Sexton 4-B (73-ac)	1000	3677
Y. L. Rogers & L. F. Merritt Drl. Corp., A. L. Still 1 (11-ac)	480	3705
Rozel Oil Corp., Sam Williams 5-B (131.6-ac)	1000	3683
Shell, M. H. Bivins 16-A (113.4-ac)	8500	3600
J. B. Watson 53 (385.2-ac)	9000	3584
Sinclair Prairie, M. Kennedy 1-C (20.2-ac)	750	3644
Stanolind, L. B. Morse 3 (12½-ac)	8600	3651
Texas, H. T. Elder 26 (53½-ac)	8000	3667
Tide Water, J. M. Blackman 14 (80.86-ac)	7000	3645
H. P. Leverett 15 (109.44-ac)	9500	3676
LONGVIEW AREA—		
Amerada, D. B. McPherson 5 (40-ac)	8800	3571
Arkansas Drl. Co., Nell Buie 2(27-ac)	7000	3635
Atlantic, J. C. Judge 69 (455-ac)	10,500	3528
J. C. Judge 70 (455-ac)	10,600	3528
J. C. Judge 73-A (455-ac)	10,500	3525
Ben G. Barnett et al, O. A. Phillips 1 (100-ac)	1500	3703
Barnsdall-Houston, M. G. McGrede 18 (109-ac)	9700	3639
Joe G. Beard et al, W. L. Fuller 9 (73-ac)	100	3692
C. & G. Oil Co., G. E. McGrede 2 (10-ac)	10,000	3652
Conservative Oil Co., C. J. Mackey-Humble 3 (145-ac)	3000	3738
Delta Drl. Co., R. A. Adkins 1 (123-ac)	5000	3735
Eastern Texas Pet. Co., T. J. Dunbar 21 (169-ac)	3000	3665
D. A. Fleet 5 (112-ac)	6000	3644
Empire, L. J. Rogers 10 (70.43-ac)	11,000	3629
Gulf, J. C. Judge 75 (518.3-ac)	8000	3501
W. A. Ray 11 (813.73-ac)	500	3582
Humble, A. L. Hughes 12 (91.8-ac)	9000	3641
H. M. Lawrence 20 (164.7-ac)	8000	3644
W. R. & H. A. Jones, J. H. Satterwhite 3 (13½-ac)	9600	3692
Joe Long Drl. Co., W. W. Owens 7-A (208-ac)	9000	3595
Lucey Pet. Co., McHaney-Loeb 9 (39.82-ac)	10,000	3570
Magnolia, V. L. Goolsby 7 (73¾-ac)	10,400	3558
R. B. White 21 (81-ac)	9200	3530
Mudge Oil Co., J. W. Free 2-B (8-ac)	10,000	3715
Natchitoches Oil Co., M. O. Sheppard 8 (32-ac)	9800	3576
Nathan Oil Co.-Roy A. Nelson, Walker 9 (40-ac)	3500	3567
Navarro Oil Co., T. B. Harris 12 (80-ac)	4300	3528
Producers Pet. Corp., T&P Ry. 3 (3-ac)	7200	3616
Rajo Oil Corp., J. C. Bartlett 10 (80-ac)	3800	3650
Reserve Dev. Co., L. Y. Tuttle 4 (12.69-ac)	9000	3546
Reserve-Magnolia, W. Christian 5 (26.92-ac)	7200	3636
J. K. Rigsby et al, A. J. Sanders 1 (1.19-ac)	7600	3672
Satellite Oil Co., L. M. Colburn 11 (36.85-ac)	10,400	3600
Shano Oil Co., B. Doby 9 (43-ac)	7000	3791
E. L. Smith Oil Co., C. L. Taylor 4-A (60-ac)	11,000	3558
Stanolind, L. C. Ingram 10 (80-ac)	9600	3592
Stanolind-Simms-Conoco, Flewellen 8-C (400-ac)	300	3676
Stewart Holdings, Inc.-E. Colburn, F. K. Lathrop 1 (18.93-ac)	4600	3698
Stroube & Stroube, Mackey-Humble 23 (314.6-ac)	3000	3648
Tide Water, Lake Devernia 32 (270.85-ac)	10,000	3535
Boston Moore 12 (90-ac)	11,000	3554
Yount-Lee, J. F. Flemister 11 (60-ac)	8800	3589
ANDERSON COUNTY (Cayuga Field)—		
Tide Water & Texas Seaboard, N. N. Wills 2-C (201.11-ac)	2000	4086
ANDERSON COUNTY (Long Lake Field)—		
Tide Water & Texas Seaboard, John Smith 1 (49.1-ac)	¶75	5465
VAN ZANDT COUNTY (Van Field)—		
Pure Oil Co., M. L. Gilbert 3 (103.3-ac)	100	2958

*Failures; †Junked; ¶Mil. cu. ft. gas.

Camp Hill Partially Defined to Southwest

Palestine, Texas.—Production trend to the southwest from the Camp Hill field, Anderson County, appeared to be partially defined with the failure of Gulf Production Company's W. B. Robinson 2, located on south line of D. Stilts Survey and about 1000 feet west of production, cored salt water sand in Sub-Clarksville zone at 5240-5246 feet. No oil or gas showings were present in the recovered cores, according to reports. Attempts to run formation tester failed twice because of cavings. The hole was drilled to a sub sea depth of 4616 feet, as compared to a sub sea depth of 4535 feet on the nearest producer, which was completed from two feet of sand. The company is drilling its J. M. Delaney 1 and Southern Pine Lumber Company 1, situated on the south and north flanks, respectively, of the structure.

Preliminary estimates on the gas yield of Tide Water Oil Company and Texas Seaboard Oil Company's John Smith 1, situated about 1¼ miles west by north of nearest gas production in the Long Lake field, southwestern Anderson County, rate the well capable of making in excess of 75,000,000 feet daily after plugging back from salt water sand at 5453-5465 feet, for completion in upper section of the Woodbine at 5180-5279 feet. Water was encountered at 5158 feet sub sea. With this completion the field has two small oil producers and five big gassers. Royalty interests under 110 acres surrounding Smith 1 were unitized prior to the starting of the test. The above partnership has ordered rig moved from the new completion to drill about 1¾ miles to the northeast on the J. H. Shaw and D. Cern 1216-acre lease, Daniel Parker Survey. Location is 1400 feet from south and 2330 feet from east lines of tract. No attempt was made to unitize royalty interests under adjoining tracts.

Allowable production in the Cayuga field, northwestern Anderson County, is to be advanced to 4000 barrels daily, or a gain of 1000 barrels, beginning with the June period as result of sharp gain in number of new wells and prospects of a continued active campaign in the north portion of the structure. The field scored its first well on March 1, 1934, and accumulated production passed the 1,000,000-barrel mark during the fore part of this month, with 49 wells on production. Standolind Oil & Gas Company sold its J. W. Barton 48.76-acre lease, Thos. Bristow Survey, situated in the north portion of the field, to H. L. Hunt et al for $30,000

cash, plus one-eighth over-riding royalty. J. Afton Burke et al, Corsicana, are reported to have turned their Barton 20-acre lease, offsetting the recent completion by Clark & Cowden Drilling Corporation, to the latter for a carried interest and other considerations.

Rusk Pool May Get Second Producing Well

Tyler.—Recovery of 2½ feet of oil saturated sand in the Woodbine horizon by J. J. Wood and Young's New Birmingham 3, situated about 800 feet southeast of the discovery well of the Rusk pool, Cherokee County, gives promise of making a second producer for the area. This new test was cored to 5179 feet, or 4701 feet below sea level. It is about ten feet lower on structure than the discovery well, which brought on a big lease buying campaign last June. Interest in the area was terminated abruptly when a high percentage of water appeared in the producer, and a southwest offset failed to show oil or gas in drilling to the water level. The first well has produced about 55,000 barrels of crude and is now on the pump.

Tide Water Oil Company and Texas Seaboard Oil Company's Valentine 1, Anderson County wildcat situated about nine miles north of Palestine, logged first Pecan chalk at 3621 feet, or 3168 feet below sea level and was drilling at 3700 feet. It is reported to have encountered the first Chalk section slightly higher than forecasted by geophysical surveys.

Harry Williams of Houston is moving in equipment to drill a wildcat about two miles northeast of Normangee, Leon County, having made location in the southwest portion of the B. H. Henry 70-acre tract, Robert Rogers Survey, and near a test recently junked at 2775 feet.

Casing is to be run by J. W. Kemp Company, Inc., Taylor, on its Limestone County wildcat about 2½ miles north of Thelma, to test oil and gas showings logged by Val Delong 1, in Woodbine sand at 2764-2866 feet. It is near a small gasser developed recently by David J. Crawford et al in the same horizon and was drilled on a 40-acre lease donated by the latter.

LAWRENCE O'DONNELL, of Boling, Texas, was the speaker at the Houston Geological Society's weekly meeting May 23. He discussed the Jefferson Island salt dome, with special reference to salt stock solution and the salt spine characteristics of the dome.

Childress County Test Showing Oil Production

Wichita Falls, Texas.—An isolated wildcat oil producer in southeastern Childress County, situated on the west border of the North Texas district, has a deep oil producer in process of completion from lime formation at 5630-5653 feet. This strike was made by Alma Oil Company, headed by Robert Watchorn, Oklahoma City, on the Mollie Low land, C NW SW Section 417, Block "H," W. & N. W. Ry. Survey, four miles south of Kirkland and 25 miles north of the Crowell field. An obstruction in the 2½-inch tubing lowered to 5644 feet has delayed the unloading of the 8¼-inch casing cemented at 5630 feet, but the well made several heads of oil, testing 40 gravity at 58 degrees temperature, between tubing and casing to sured.
indicate that a producer is virtually as-

Operations were temporarily suspended late last week to erect tankage, and cement the cellar.

Alma Oil Company holds leases on an almost solid block of 13,000 acres, and the few available tracts within the block scored a popular demand from North Texas operators. The well was drilling with an electric motor driven rotary, having spudded on February 26. Three separate gas bearing formations were logged between 4350 and 4460 feet.

Identity of the oil producing formation has been tentatively listed as the Canyon lime section of the Pennsylvanian age. This call is likely to stand under paleontological examination, as the log of the well correlates closely with the four flowing oil wells held by The Texas Company and Sun Oil Company in the Crowell field, situated near the west line of Foard County. Production in the Crowell area is developed near the 3600-foot level from the Canyon lime, which also produces near the 2200-foot level in the Chalk Hill field, Archer County. Approximately 700 acres in the latter have been proved for oil production, while a sizeable gas area lies on the east flank of the structure.

The Texas Pipe Line Company's eight-inch trunk line, extending from Panhandle to Electra and points to the east and south, is in close proximity of the Childress County wildcat, and Kirkland is on a main line railroad.

Observance of proration and rigid gas and pressure conservation has resulted in the Chalk Hill and Crowell Canyon lime areas proving profitable for the participating operators. Older fields developed in West Central Texas from the Canyon lime zone lacked this protection, and were dissipated rapidly.

More extensive wildcat exploration work is a certainty for the west border of the North Texas district should the Childress County wildcat yield commercial production. Among the wildcats now under way, the northeastern King County project of Davis, Horwitz and L. C. Heydrick on the R. B. Masterson 5219-acre tract, Section 50, F. P. Knott Survey eight miles south by west of the Cromwell field, has drilled to 1660 feet. It is using a portable rotary rig, and is slated to go to 4500 feet.

East Texas Boosts Texas Drilling Permits

Austin, Texas.—The Texas Railroad Commission last week approved permits for the drilling of 328 new wells in Texas, 70 more than were allowed the week before.

The sharp increase was accounted for by the allowance of 186 permits for wells in the East Texas field. There were 76 in Gregg County, 84 in Rusk County, 14 in Upshur County and 12 in Smith County.

In the Gulf Coast area 41 new permits were filed, of which seven were in Calhoun County. The adjacent Southwest Texas district reported 35.

North Texas lagged with 24 new wells, and there were only two in West Central Texas. East Central Texas listed 27 new locations, of which nine were in Anderson County.

West Texas reported 20 new wells widely scattered, and there were only five in the Panhandle.

Westbrook Properties Bought By H. H. Coffield

Austin, Texas.—H. H. Coffield of Rockdale has announced the purchase of all the Westbrook properties in the Williamson County area for $60,000 cash.

Included are Williamson County Pipe Line Company, leases of R. A. Westbrook, The Sequoia Oil Company and Westbrook Oil Corporation.

There are 26 producing wells on 200 acres, which are now producing about 200 barrels per day.

These properties will be operated by Coffield in conjunction with the Chapman properties recently acquired, and constitute about 95 percent of the Chapman-Abbott field.

Ector County Play Active; Good Well at Scharbauer

San Angelo, Texas.—Open flow gauge of 891 barrels of oil and 1,695,000 feet of gas was recorded by Gulf Production Company's Scharbauer-Goldsmith 1, C NW Section 10, Block 44, T & P Ry. Survey, T-1-S, second producer for the Scharbauer structure, Ector County, thereby exceeding earlier estimates on the probable production. The well has been officially completed and shut-in. Arrangements for a pipe line connection from one of several lines that are close by are still pending. This new producer was drilled only two feet into the saturated dolomite lime topped at 4170 feet, or 1058 feet below sea level, and production test was through 8⅝-inch pipe cemented at 3750 feet. It is about 2¾ miles southeast of Landreth Production Corporation et al's Scharbauer 1, discovery well of the area.

Fishing jobs retarded progress on Landreth Production Corporation et al's two tests drilling to the north and northwest of the discovery producer. Scharbauer 1-A, SEc NW Section 13, Block "A", PSL Survey, lost bit at 2380 feet, and Cowden et al 1, SWc Section 18, Block 44, T-1-N, lost bailer at 4165 feet, having topped first brown lime at 3705 feet, or 513 feet below sea level. This compares with a sub sea depth of 548 feet on the same marker logged by the discovery well, which found first oil pay at 4102 feet, or 940 feet sub sea. Empire Gas & Fuel Company's Cummins 1, SEc Section 10, Block 45, T-1-N, scored a high structural position in topping brown lime at 434 feet below sea level, and late last week had drilled to 3950 feet, or 716 feet sub sea. Production is due within the next 250 feet.

Confronted with expiring leases on nine sections of land situated to the south and southeast of a wildcat in Winkler County making gas from lime horizon, Gulf Production Company increased its number of tests slated to be drilled on Keystone Cattle Company's ranch to a total of nine the past week. Contracts have been awarded for the drilling of the group with rotary rigs simultaneously, with operations underway below surface casing on the first two authorized several weeks ago. An area approximately two miles square is to be tested by the company's nine projects. The company's lease contract requires production by August 22. The testing of each section, which is considered a separate unit, according to interpretation placed on recent Texas Supreme Court decision involving a test case by Magnolia Petroleum Company against the State, is to be made by Gulf Production Company as a precautionary measure, as an oil field is generally believed to be in the making in the Keystone-Walton area.

Abnormally high structural position and development of sulphur gas production in upper lime section scored by Sid Richardson et al's J. B. Walton-Pure 1, NWc SW SW Section 1, Block B-3, PSL Survey, situated about five miles northeast of the Sayre field, is the basis for Gulf Production Company major development program on a wildcat block. Standard rig has been replaced with a rotary by Richardson et al to kill a flow of 8,000,000 feet of dry sulphur gas at 2945 feet to remove split joint of the 8¼-inch string cemented at 2318 feet for protection. Plans are to lower 10-inch pipe to overlap that portion of the smaller string than can not be unscrewed and pulled. This original test of the unexplored area topped brown lime at 2115 feet, or 832 feet above sea level, making it the highest structural point in the county. Oil production is expected near the 3100-foot level.

Gulf Production Company is observing a uniform spacing of 330 feet from property line on each of its nine tests on the Keystone property. Locations follow: No. 1, NEc NW Section 10, Block 3; No. 2, NWc Section 17, Block 3; No. 3, NWc NE Section 11, Block 3; No. 4, NEc Section 20, Block 3; No. 5, NWc SW Section 6; No. 6, NWc NE Section 16; No. 7, NWc SW Section 14; No. 8, SWc Section 13; and No. 9, SWc Section 18, Block 2, PSL Survey.

Gulf's Deep Test Coring Ahead After Having Water

San Angelo, Texas.—Coring operations were under way late last week at 12,755 feet on the record depth test of Gulf Production Company on the J. T. McElroy ranch, Upton County, after the well developed a heavy yield of sulphur water when an attempt was made to swab the drilling fluid from the hole for a production test at 12,720 feet. Extremely porous limestone carrying odor and color of petroleum from lime section at 12,664-12,720 feet, identified as the Ellenberger section of the lower Ordovician lime series, the projected goal set by the company when operations were started in March, 1933, failed to yield oil or gas with the water. The test is considered definitely eliminated as a probable producer by reason of the presence of large head of sulphur water in the Ellenberger, and is being deepened, according to reports, for geological information. Possible oil producing horizons below the Ellenberger are believed beyond reach of present-day drilling equipment in this particular operation.

The past week also marked the elimination of Paul C. Teas et al's C. E. Mower 1, C NE SW Section 39, Block 5, TW&NG Ry. Survey, Sutton County, as a potential producer from the Ordovician lime. Sulphur water was encountered in drilling to 4927 feet. Operations were halted for several weeks at 4757 feet, and when swabbed down at the latter depth the hole yielded salt water with a few gallons of oil. Top of Ordovician has been tentatively called at 4520 feet, with an elevation of 2349 feet.

In northeastern Upton County, the projected Ordovician lime test of Humble Oil & Refining Company on the L. W. Pollok-Gulf tract has progressed to the 5500-foot level. Gulf Production Company's W. N. Waddell et al 1, proposed 10,000-foot test, remains idle at 4595 feet, awaiting the arrival of a heavy duty rotary rig to replace cable tools.

Ward County Producer

Partially explored territory near center of south line of Ward County and near the Pecos River accounted for its first big producer the past week when Atlantic Oil Producing Company's J. Miller 2, situated near the east corner of Section 3, J. C. Russell Survey, developed a natural flow of 1500 barrels of oil and 5,000,000 feet of gas from lime at 2585 feet. The well is reported to have also made about five percent bs&w. The first test by the company on the Miller tract was completed last December flowing 60 barrels daily after shot in sandy-lime at 2430 feet. Some operators hold to the view that a reef type structure producing from dolomite lime exists in this area, while production to the east and northeast is largely from sandy-lime formation.

May Kill Panhandle 5-Day Open Flow Gauge

Pampa, Texas.—Five-day open flow production gauges may be discontinued on prolific completions in Wheeler County section of the Texas Panhandle, except on leases fortified with big tanks to accommodate the surplus oil yield, as result of one major pipe line company having limited its runs to a 24-hour potential test on new well connections. Disruption of pipe line service and congestion has been experienced by the carriers in trying to absorb the flush yield of wells undergoing the official proration potential test. Numerous completions lately have produced amounts ranging up to a peak of 31,400 barrels in establishing potential ratings.

The Texas Pipe Line Company is the first pipe line operator in the area to restrict crude runs from new wells to the first 24-hour open flow. Operators have the alternative of erecting big tanks, and continuing to produce sufficient crude within the test period to amortize the cost of drilling and equipping a well. The Panhandle is the only district in the state that permits a big well to pay out in five days. Excess oil produced during the proration test is charged back to the well, resulting in some wells being off production 60 to 75 days after initial gauge.

Big Well

Record crude yield for western Wheeler County's prolific area was recorded early in May when Skelly Oil Company's D. E. Johnson 2, SWc S½ Section 47, Block 24, H&GN Ry. Survey, gauged 31,400 barrels of pipe line oil in five days from granite wash formation at 2347-2485 feet. This well produced 9077 barrels of oil and 20,000,000 cubic feet of gas the first day, and dropped to 4862 barrels on the fifth day. Helena Oil & Gas Company's P. M. Keller 7, located 990 feet out of the SWc S½ Section 48, averaged 4086 barrels daily for four days from granite wash between 2371 and 2500 feet, with an elevation of 2549 feet. Top of lime was logged at 1695 feet. The Texas Company's W. B. Bush 3, NWc S½ NE¼ Section 48, averaged 2293 barrels daily for five days on gas lift from three oil zones, with the hole bottomed at 2533 feet, or at sea level depth. The well produced 2887 barrels the first day and 1958 barrels on the fifth day.

Wheeler County

The Woodley-Osborne pool, situated in southeastern Wheeler County, scored another failure with the testing of a hole full of salt water in Johnson and B. G. Barnett's C. I. Pryor 1, NEc E½ NE¼ Section 49, Block 13, H&GN Ry. Survey, from lime at 2244-2245 feet. These Oklahoma City operators also met with disappointment in deepening their Boren 1, NWc NE¼ Section 24, Block 13, from 2051 feet to water zone at 2220 feet.

Oil development on the south flank of the granite ridge in Gray County received another setback the past week when The Texas Company's W. H. Taylor 2-C, NEc E½ Section 53, Block B-2, H&GN Ry. Survey, encountered water at 3285-3294 feet. Negligible showings of oil and gas were passed up in granite wash and lime zones near the 2850- and 2930-foot levels. Top of granite wash was logged at 2750 feet, with an elevation of 3075 feet. This failure is about 1¼ miles northeast of The Texas Company's Taylor 1-C, which flowed 233 barrels natural at 3006 feet when completed last December.

Kerr County

San Antonio, Texas.—Jeff Love & Eastland Oil Company's Jeff Love 5-E, wildcat 45 miles southwest of Kerrville, in Kerr County, is standing practically full of salt water at 5625 feet, believed to be in the Ordovician. It is on the Love ranch prospect and is in one of the most interesting tests thus far drilled in that particular sector.

With an elevation of 2338 feet, derrick floor, it has a gas show at 3000-45 feet, and an oil show at 3520-30 feet, both in the Pennsylvanian. The latter sand swabbed considerable oil, but showed salt water and was deepened.

West Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ECTOR COUNTY—		
W. A. Black & Son, W. E. Connell 3	630	3621
Gulf Prod. Co., Goldsmith-Scharbauer 1	891	4172
PECOS COUNTY—		
Easter & McCurdy, Smith-Shell 1-A	80	900
Stanolind, Tippett-Dixie 12-B	31	451
UPTON COUNTY—		
J. W. Ellis et al, J. W. Robbins 1-A	750	2076
Gulf Prod. Co., Shirk 2-E	177	2326
WARD COUNTY—		
Atlantic O. P. Co., J. Miller 2	1500	2585
Rector Oil Co.-Pat Hill & O. C. Harper, L. Monroe 2	*	4757
Tex-Mex Pet. Corp., S. S. Owens-Shell 5-B	415	3025
S. G. Smith-Pure 5	102	2475
SUTTON COUNTY—		
Paul C. Teas et al, C. E. Mower 1	*	4927

*Failures; †Junked; ¶Mil. cu. ft. gas.

North Texas Completions

Company, Well and Location	Init Prod. Bbls.	Depth
L. T. Burns et al, E. E. Hildebrandt 6, sec 143	35	1160
Mamie Kolb 1, blk 116	25	1253
Continental, Falls 12-D	84	1087
Falls County 11-E	56	1109
Falls County 12-E	*	1108
Fain-McGaha Oil Corp., O. D. Thompson 1, sec 20	*	1637
Golding & Cochran, B. R. Jeske 4, sec 6	*	1185
J. H. Hamer & G. J. Schott, Hamonson 1	5	978
W. B. Hamilton Pet. Co., W. Pace 27, blk 100	75	1151
Hardegree & Gipson, J. M. Spoonts 1, sec 2434	*	1460
Huggins Oil Co., Walter Ford 2	8	655
Humble, J. B. Miller 1, blk 19	*	1673
L. L. Lyon et al, Mrs. H. S. Griffin 1, blk 5	*	1930
Chester Martin et al, J. A. Bell 1, sec 14	*	125
S. V. White et al, L. W. McCrory-Wilson 1, blk 37	*	1628
BAYLOR COUNTY—		
W. N. Alexander et al, W. H. Portwood 2, sec 1587	190	1406
Consolidated Oil Co.-Pet. Prod. Co., Portwood 4-D, sec 1587	250	1402
C. S. Davis et al, H. F. Harmel 1, sec 2452	*	1520
Ray & Staniforth, Portwood 3-A, sec 1587	7	1404
CLAY COUNTY—		
Kennedy et al, H. W. Perkins 1, blk 26	3	270
COOKE COUNTY—		
Kewanee O&G Co., Timmins-Hyman 21-A	20	1204
W. E. Manness et al, W. Blakeley 1	*	1814
F. W. Merrick, Inc., F. Knabe 2, blk 6	100	766
Geo. L. Pace et al, S. P. Aldredge 1	15	1136
JACK COUNTY—		
Brazos River Gas Co., J. M. Box 4	*	3070
MONTAGUE COUNTY—		
Benton & Holmes, C. L. Davenport 10-B	200	1687
Continental, J. W. Lawler 7	*	1787
Raisen Bros. et al, G. Hinton 4	13	804
WICHITA COUNTY—		
E. J. Stump et al, Munger 1-C, blk 24	*	1795
WILBARGER COUNTY—		
Luther Webb & E. Stilley, Waggoner Est. 1-E, sec 4	*	1912
YOUNG COUNTY—		
Baker & Pardue, H. M. Donnell 4	300	3343
Bonnell Oil Co., J. W. Jones 2	*	531
L. A. Long et al, C. K. Garvey 1-C, sec 1858	*	868
Norwood Bros., R. Hammond 1, sec 2446,	*	1275
E. C. Stovall & Son, Fee 5-B	*	2910
Stuckey O&G Co., L. F. Gregg 1	*	844

Texas Panhandle Completions

Company, Well and Location	Init Prod. Bbls.	Depth
GRAY COUNTY—		
Bradshaw O&G Co., E. L. Sackett 4	365	3300
Dixon Creek O&R Co., H. Horner 8	420	3262
Empire, A. C. Shields 3	304	3203
W. C. Jones et al, A. J. Culler-Shell 2	780	3300
Texas Co., W. H. Taylor 2-C	*	3294
Wilcox O&G Co., Combs-Worley 36	585	3032
MOORE CONUTY—		
Barnsdall-Sunray, Francis Jones 2	¶31	3500
Sunray Oil Co., C. R. Jones 3-A	¶17-25	3636
WHEELER COUNTY—		
Helena O&G Co., P. M. Keller 7	4086	2500
Johnson & B. G. Barnett, C. I. Pryor 1	*	2245
Texas Co., W. B. Bush 3	2448	2533

*Failures; †Junked; ¶Mil. cu. ft. gas.

Large Ranch Holdings Delay Development in South Texas

EARL S. POST
Staff Representative

San Antonio, Texas.—South Texas will be slow to realize profits from many of its Gulf Coast oil fields due to the massiveness of its ranches. These important new strikes, however, will in most cases prove to be model reserves, developed in a consistent and conservative manner.

This particularly refers to such fields as have been discovered by the Plymouth Oil Company on the Welder Ranch in San Patricio County, as well as several other completely controlled producing areas along this trend.

The Plymouth Oil Company on May 13, 1934, opened the Sinton field, just north of the town by the same name. Months were spent outlining this structure and studying its production problems. On April 21, this year, the company opened a second field, ten miles northeast of the town of Sinton.

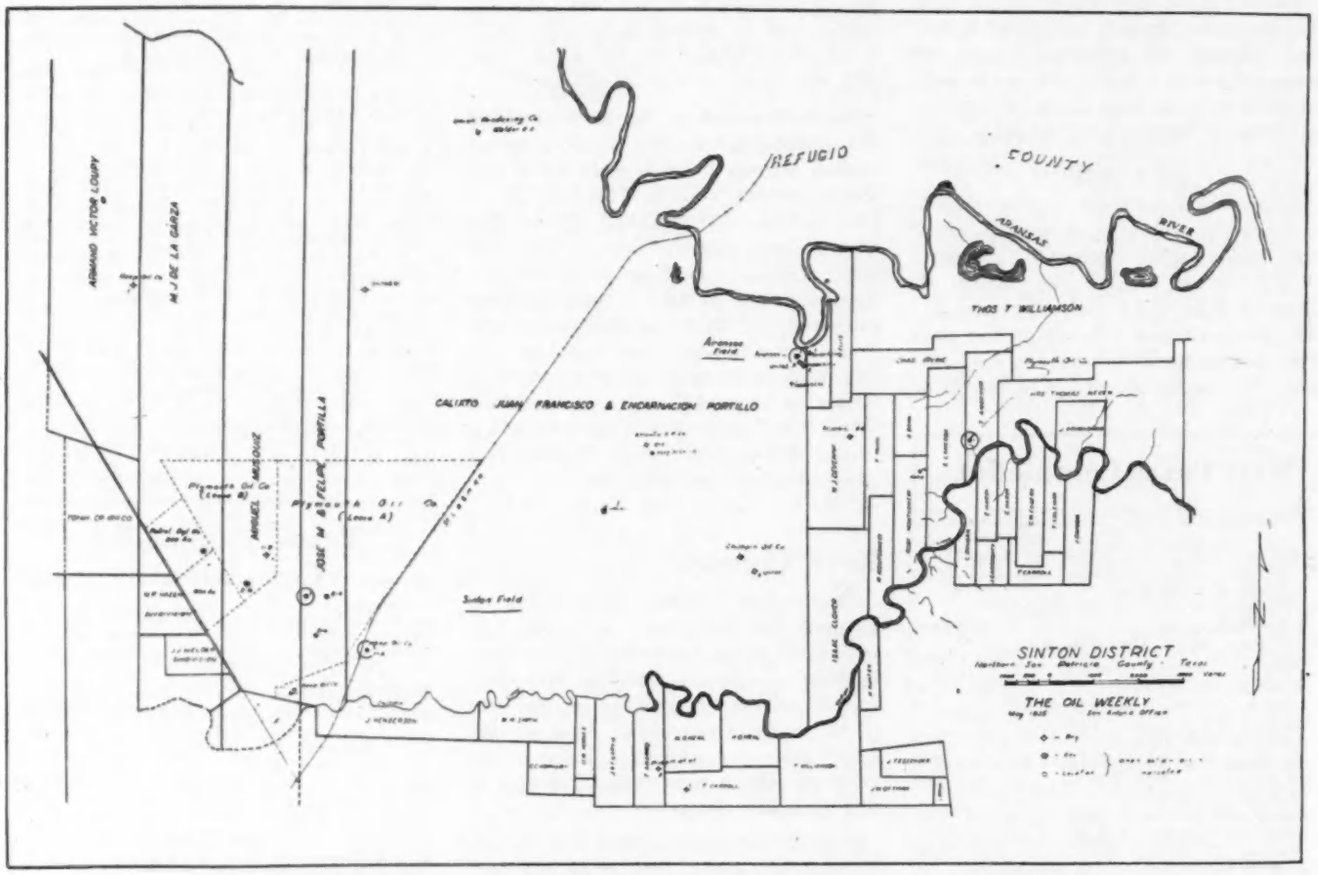
The Welder ranch in San Patricio County, consists of tens of thousands of acres and has four producing fields. Much of the property has not been explored and it is reasonable to believe that additional producing properties will be developed.

Plymouth Oil Company entered San Patricio County several years ago, studying the ranch both geologically and geophysically. Several blocks were taken and contract let to Al Buchanan for the drilling of the first test. It was Welder 1-A, drilled to 6602 feet, where an electric formation testing device was run. Production was indicated higher in the hole and the well plugged back and sidetracked to 5434 feet, sand being cored at 5415-27 feet, shale 5427-30 feet, sand 5430-34 feet. The well was brought in making about 25,000,000 cubic feet of gas and spraying several barrels of high gravity oil per hour. Plymouth Oil Company drilled four more wells on the block, one being abandoned as a failure, two making high pressure gas wells spraying oil and the fourth, completed April 25, this year, as an oil producer, making 10 barrels of oil per hour through 3/16- and 1/16-inch chokes.

Plymouth Oil Company's Welder 1-C, 10 miles northeast of Sinton, was completed on April 21 flowing 11 barrels of oil per hour through 3/8-inch choke, showing tubing pressure of 225 pounds and casing pressure of 525 pounds.

With the exception of several tracts ranging up to 500 acres held by the Heep Oil Corporation and one 300-acre block held by the Petrol Corporation, both fields are completely held by the Plymouth Oil Company.

The situation being as above, it is possible for the Plymouth to completely work out an engineering play



Circled wells are discovery wells. Upper circle is discovery well of Aransas Gas field. Next below is of newest Plymouth Oil Company strike. Southeast side of Sinton field is Heep Oil Corporation's discovery well of 5800-foot sand. Other circled well is Plymouth Oil Company's discovery well of Sinton field.

for production to enable it to obtain the largest recovery with the least gas wastage at the lowest possible cost. Before entering either location for the drilling of the first tests, the company had a complete picture of the structure, in so far as available information could present it. It is on this basis that the development campaign is being outlined.

Were the blocks divided among several companies, or cut up by a number of land owners, it would be necessary to outline the campaign to fit the offset situation, rather than the most conservative development possible.

The above picture can be applied to a number of the newer fields along the coastal trend of South Texas. The Tomoconnor field in Refugio County is completely controlled by the Quintana Petroleum Company. This company has a solid block of 4000 acres out of the huge Tom O'Connor ranch, upon which only eight producers have been completed during nearly a year. The company also has another 4000-acre block out of the same ranch upon which it has drilled two deep tests, one going to 9937 feet.

Keeran Rranch in Victoria County, although several years old, had six oil wells. The production centers in a 5000-acre block held by the Gulf Production Company. Humble Oil & Refining Company's D. M. O'Connor controlled block in Refugio County, although nearly as old as the Greta field, has only a few producing wells.

McFaddin Ranch, Victoria County, probably the largest producing district in South Texas from area standpoint, has seen the drilling of about two dozen tests, including the development of numerous gas sands, and a deep oil sand. It is controlled by several companies holding large blocks and only exploratory tests have been drilled to date.

The giant King Ranch, covering several counties, involved approximately 1,500,000 acres and is under lease to the Humble Oil & Refining Company. This company has had this lease several years, but has not drilled a single well.

As a result, these tremendous ranches convert a large portion of this trend of the Gulf Coast into a reserve, rather than an immediate source of production, and which will be conservatively developed as needed.

The contrast is the Refugio field, in which development of oil commenced in 1928. This reserve was situated on a townsite and an orgy of drilling on small locations resulted in the probable loss of millions of barrels of oil, which could have been recovered under different conditions.

Three Interesting Texas Coast Locations Made

Houston.—Three new interesting locations were made during the past week for drilling wells on the Texas Gulf Coast.

Amerada Petroleum Company made location for Houston Farms Development 2, in the Rattlesnake mound area and 2150 feet southeast and 58 feet southwest of the north corner of B.B.B.&C. Survey, Abstract 445, being in the Perry Austin No. 106 Survey, Brazoria County.

Humble Oil & Refining Company made location for Broussard 3, in the Anahuac field, Chambers County. The test is located 1399 feet out of the northwest corner of H.&T.C. Survey No. 63.

Paul Sanderson has made location for Texas Long Leaf Lumber Company 1, in the Splendora area of Montgomery County. The wildcat is located in the Walker County School Land Survey, in the center of the east 20 acres of the south half of Black 6 of the Steen Subdivision.

To Perforate Casing On Galveston County Test

Houston.—Turnbull & Irwin's Piazza 1, Dickinson field, J. S. Sherman Survey, Galveston County, was preparing to perforate casing from 7950 to 7970 feet at the end of the week after setting seven-inch casing at 8255 feet. The bottom of the hole is 8418 feet. An electrical logging device showed a sandy shale formation where the operators are going to perforate which showed oil.

Matagorda County

Houston.—H. M. Smith's Wadsworth 1, S. R. Fisher Survey, Lot 3, Block 5, Matagorda County, was drilling ahead below 8198 feet at the end of the week after showing gas from 8175 to 8178 feet. The operators drilled in a formation like sand the well started to blow out and heavy mud was pumped in and drilling was resumed.

Eastern A.P.I.
Continued from page 46

Thursday, June 6

10:00 A. M.

Presiding—George Welker, president, United Natural Gas Company.

"Latest Methods of Pumping Oil, including equipment."—J. C. Askam, Ohio Oil Company.

Discussion by W. L. McCloy, vice president, Ohio Fuel Company; C. B. Turner, vice president, South Penn Oil Company; W. J. Brundred, Brundred Oil Corporation; W. F. Clinger, Clinger Oil & Gas Company, and Kenneth F. Barnes, Penn State College.

11:00 A. M.

Presiding—Ralph Zook, Sloan and Zook.

Nationally known speaker—hot subject of the day.

Luncheon 12:00 to 1:00 P. M.

1:30 P. M.

Presiding—L. L. Tonkin, vice president, Hope Natural Gas Company.

"The mechanics of and economic success of the acid treatment of oil and gas bearing formations; also a summary of oil and gas developments in Michigan, including rotary drilling."—R. B. Newcombe, Michigan State Geologist.

Discussion by C. D. Hunter, geologist, Kentucky West Virginia Gas Company; Wallace B. Gribble, general superintendent, Hope Natural Gas Company; B. D. Phillips, general manager, T. W. Phillips Gas & Oil Company, and George Wittmer, Jr., Wittmer Oil & Gas Properties.

2:15 P. M.

Presiding—Dr. K. C. Heald, staff geologist, Gulf Companies.

"Past experiences and future possibilities of detecting Sub-Surface Structures in Eastern Oil and Gas Fields."—Frank M. Brewster, general manager, Belmont Quadrangle Drilling Corporation.

Discussion by C. E. Fralich, geologist; Dr. J. French Robinson, vice president, Peoples Natural Gas Company; James D. Sisler, geologist, Carnegie Natural Gas Company, and Dr. O. Fisher, geologist, Owens-Libby-Owens Gas Company.

3:15 P. M.

Presiding—E. J. Egan, vice president, Manufacturers Light & Heat Company.

"Latest methods of plugging off permeable lenses of saturated or barren sands in water flooding, gas repressuring, gas storage reservoirs, including the possibilities of permanent plugging of abandoned oil and gas wells."—C. P. Parsons, Halliburton Oil Well Cementing Company.

Discussion by J. G. Montgomery, Jr., operating manager and geologist, United Natural Gas Company; Frank E. Eckert, Hanley and Bird, and S. W. Meals, president, Carnegie Natural Gas Company.

4:15 P. M.

Report of nominating committee and annual election of officers for Eastern Division.

LLOYD NASH, former scout and land man for Gulf Production Company in North Texas and in recent years engaged in publishing an oil company directory at Dallas, has been appointed an oil royalty expert with the recently created investigating body for the Federal Securities and Exchange Commission. Nash has been assigned to the Fort Worth district office.

Two Large Samfordyce Wells Are Completed

San Antonio, Texas.—Two of the largest producers in months were completed during the past week in the Samfordyce field of Hidalgo County. They were on opposite ends of the field.

Skelly Oil Company's Seabury 1-A, Share 356, Porcion 38, a west outpost well, gauged 60 barrels an hour through ⅜-inch choke on tubing, showing a tubing pressure of 160 pounds and casing pressure of 500 pounds. It was cut back on a ⅛-inch choke, where it made 15 barrels an hour with tubing pressure of 140 pounds and casing pressure of 500 pounds. The test has gas sand at 2804-6 feet and oil sand from there to the total depth of 2813 feet.

H. J. Porter's C. E. Smith 1, Tract 278, Porcion 40, in the southeast side of the field, made slightly in excess of 40 barrels an hour through ⅜-inch choke, showing 260 pounds and 280 pounds on the tubing and casing, respectively. It had sand at 2752-63 feet, shale 2763-64 feet, sand 2764-66 feet. Casing was perforated at 2755-59 feet.

About four miles northeast of this field, D. M. C. Oil Company is preparing to drill plugs on a promising wildcat. It is the Daskam 1, Block 34, Porcion 45, which had a sand section from 4090 to 4114 feet and set five-inch casing atop the sand. Both cores and electric formation logging device indicate a possible producing sand at this level.

Bee County Pettus Sand Areas Get Minor Extension

San Antonio, Texas.—Pettus sand fields of Bee County continue to receive minor extensions with fair sized flowing wells. West Tuleta field, already the largest of the group, is still undefined to the southwest and more acreage likely will be added. The Dirks pool, to the nrthwest, however, is getting the bulk of the new drilling activity.

Millls Bennett's Bassinger 1-A cored sand at 3846-52 feet, and is in process of completion. Same operator has reached 2500 feet in L. W. Dirks 1, H. L. Williams Survey, one and one fourth miles southwest of production. Dirks Brothers' R. C. Harris 1, just southwest of the discovery, looks like the biggest well in the field. It is flowing from sand at 3890-98 feet, making possibly 20 barrels an hour. Home Corporation Company has set casing in C. W. Bassinger 2, after coring saturated oil sand. Same company's Bassinger 5 is washing in, having the sand at 3811-27 feet.

Stanolind Oil & Gas Company's G. W. Walton 1, in the West Tuleta field, gauged six barrels per hour through 3/16-inch choke from sand at 3951-56½ feet. It is showing a tubing pressure of 275 pounds; casing pressure 650.

Leslie McKay's P. L. Campbell 2 is completing. It had sand at 3910-20 feet, where drill stem test showed 650 feet of oil and 75 pounds pressure in 10 minutes.

A narrow, but prolific ridge of oil production is being established along the east flank of the Caesar field. The gas-oil contact is only about two locations from the oil-water contact. Caesar Oil Company's Miller 5, offset to a large oil producer, showed a little oil, but finally went to gas at 3027-35 feet. Same Company's W. J. Vaughn, however, just southeast of the gas zone, is a low pressure well at 3014-34 feet. It is flowing about eight barrels of oil an hour. Firm Oil Company's Grissom 2, south offset to an excellent oil well, is reported to have shown some water and oil in the regular sand.

Third Oil Producer Completed at Port Lavaca

San Antonio, Texas.—Third oil producer for the Port Lavaca field, Calhoun County, was in the making during the week with Halliburton Oil Production Company's D. Burton 1, setting seven-inch casing to 6235 feet, in oil sand. The hole is bottomed at 6262 feet. This well is an offset to the discovery oil well.

The completion of the above well will give three producers in the lower portion of the producing section and one gasser spraying distillate from the upper part of the section.

The Texas Company posted a flat price of 80 cents per barrel at the well for all crude in the field. This price, however, does not include the distillate. Oil is being handled through field lines to loading racks on railroad right-of-way.

A number of locations have been made in the district by The Texas Company, Halliburton Oil Production Company, Crown Central Petroleum Company, Steinberger Petroleum Company and others, but their actual commencement has been slightly delayed pending the information on several important outpost wells now drilling. The Texas Company's expiring leases will bring about quick drilling of several leases.

The Texas Company's Bladrone 1, southwest of Port Lavaca and south of the field, is drilling at 6960 feet. Same company's Martin 1, nearly four miles southwest of production, is shut down for repairs at 6439 feet. Duelberg 1, north of the discovery oil well, drilled through entire section and plugged back to 6070 feet to sidetrack. At 6110 feet in the sidetracked hole, drill stem stuck and a fishing job is now under way.

Two Active Tests In New Mercedes Pool

San Antonio, Texas.—Union Sulphur Company has two active operations in its recently discovered Mercedes 7500-foot field in Hidalgo County. Both tests are old wells, which are being re-worked and carried down to the producing level.

American Rio Grande Land & Irrigation Company 1, only 200 feet southeast of the discovery, originally abandoned at 6431 feet with stuck pipe, had cleaned down to 1750 feet. It will sidetrack and drill ahead to the present horizon. Second well on the same fee, 1¼ miles northeast of the discovery, is drilling at 4325 feet, after sidetracking around 4000 feet. Total depth is 8044 feet.

The discovery well, American Rio Grande Land & Irrigation Company 3, is flowing 200 barrels per day from sand at 7477-93 feet. It was flowing 150 barrels per day, but an increase in the allowable was granted. The oil is 57.4 gravity, corrected.

Cole Completions Are Disappointing

San Antonio, Texas.—O. W. Killam's A. M. Bruni 36, Bruni townsite area of the Cole field, Webb County, is a 25-barrel an hour producer through choke from sand at 3373-3410 feet. He is drilling Bruni 37 below 3500 feet.

American Liberty Oil Company's Bruni 2-C, showed salt water at 3427 feet and plugged back to 3403 feet, where it again showed some water. It is being plugged back again. If the next plug back job fails to hold, the test likely will sidetrack and re-drill the sand. No announcement has been made, however.

Associated Oil Company's A. M. Bruni 5 has been spudded and Bruni 6 is drilling at a shallow depth.

Highland Oil Company's A. B. Bruni 8 topped the sand at 3387 feet and deepened to 3407 feet, where completion was attempted. The well is showing considerable oil, but will not flow and is being deepened slightly. Same company has several more locations to be drilled immediately.

Houston Library Oil List Is Distributed

Houston, Texas.—The Houston Geological Society has distributed among its members a list of books and bulletins available in the Houston public library covering petroleum and kindred subjects. The library has a large collection of volumes and bulletins, and also has files of numerous journals and magazines dealing with petroleum.

Placedo Outpost Test Going Deeper After Show

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HOUSTON, TEXAS

Two Large Samfordyce Wells Are Completed

San Antonio, Texas.—Two of the largest producers in months were completed during the past week in the Samfordyce field of Hidalgo County. They were on opposite ends of the field.

Skelly Oil Company's Seabury 1-A, Share 356, Porcion 38, a west outpost well, gauged 60 barrels an hour through ⅜-inch choke on tubing, showing a tubing pressure of 160 pounds and casing pressure of 500 pounds. It was cut back on a ⅛-inch choke, where it made 15 barrels an hour with tubing pressure of 140 pounds and casing pressure of 500 pounds. The test has gas sand at 2804-6 feet and oil sand from there to the total depth of 2813 feet.

H. J. Porter's C. E. Smith 1, Tract 278, Porcion 40, in the southeast side of the field, made slightly in excess of 40 barrels an hour through ⅜-inch choke, showing 260 pounds and 280 pounds on the tubing and casing, respectively. It had sand at 2752-63 feet, shale 2763-64 feet, sand 2764-66 feet. Casing was perforated at 2755-59 feet.

About four miles northeast of this field, D. M. C. Oil Company is preparing to drill plugs on a promising wildcat. It is the Daskam 1, Block 34, Porcion 45, which had a sand section from 4090 to 4114 feet and set five-inch casing atop the sand. Both cores and electric formation logging device indicate a possible producing sand at this level.

Bee County Pettus Sand Areas Get Minor Extension

San Antonio, Texas.—Pettus sand fields of Bee County continue to receive minor extensions with fair sized flowing wells. West Tuleta field, already the largest of the group, is still undefined to the southwest and more acreage likely will be added. The Dirks pool, to the nrthwest, however, is getting the bulk of the new drilling activity.

Millls Bennett's Bassinger 1-A cored sand at 3846-52 feet, and is in process of completion. Same operator has reached 2500 feet in L. W. Dirks 1, H. L. Williams Survey, one and one fourth miles southwest of production. Dirks Brothers' R. C. Harris 1, just southwest of the discovery, looks like the biggest well in the field. It is flowing from sand at 3890-98 feet, making possibly 20 barrels an hour. Home Corporation Company has set casing in C. W. Bassinger 2, after coring saturated oil sand. Same company's Bassinger 5 is washing in, having the sand at 3811-27 feet.

Stanolind Oil & Gas Company's G. W. Walton 1, in the West Tuleta field, gauged six barrels per hour through 3/16-inch choke from sand at 3951-56½ feet. It is showing a tubing pressure of 275 pounds; casing pressure 650.

Leslie McKay's P. L. Campbell 2 is completing. It had sand at 3910-20 feet, where drill stem test showed 650 feet of oil and 75 pounds pressure in 10 minutes.

A narrow, but prolific ridge of oil production is being established along the east flank of the Caesar field. The gas-oil contact is only about two locations from the oil-water contact. Caesar Oil Company's Miller 5, offset to a large oil producer, showed a little oil, but finally went to gas at 3027-35 feet. Same Company's W. J. Vaughn, however, just southeast of the gas zone, is a low pressure well at 3014-34 feet. It is flowing about eight barrels of oil an hour. Firm Oil Company's Grissom 2, south offset to an excellent oil well, is reported to have shown some water and oil in the regular sand.

Third Oil Producer Completed at Port Lavaca

San Antonio, Texas.—Third oil producer for the Port Lavaca field, Calhoun County, was in the making during the week with Halliburton Oil Production Company's D. Burton 1, setting seven-inch casing to 6235 feet, in oil sand. The hole is bottomed at 6262 feet. This well is an offset to the discovery oil well.

The completion of the above well will give three producers in the lower portion of the producing section and one gasser spraying distillate from the upper part of the section.

The Texas Company posted a flat price of 80 cents per barrel at the well for all crude in the field. This price, however, does not include the distillate. Oil is being handled through field lines to loading racks on railroad right-of-way.

A number of locations have been made in the district by The Texas Company, Halliburton Oil Production Company, Crown Central Petroleum Company, Steinberger Petroleum Company and others, but their actual commencement has been slightly delayed pending the information on several important outpost wells now drilling. The Texas Company's expiring leases will bring about quick drilling of several leases.

The Texas Company's Bladrone 1, southwest of Port Lavaca and south of the field, is drilling at 6960 feet. Same company's Martin 1, nearly four miles southwest of production, is shut down for repairs at 6439 feet. Duelberg 1, north of the discovery oil well, drilled through entire section and plugged back to 6070 feet to sidetrack. At 6110 feet in the sidetracked hole, drill stem stuck and a fishing job is now under way.

Two Active Tests In New Mercedes Pool

San Antonio, Texas.—Union Sulphur Company has two active operations in its recently discovered Mercedes 7500-foot field in Hidalgo County. Both tests are old wells, which are being re-worked and carried down to the producing level.

American Rio Grande Land & Irrigation Company 1, only 200 feet southeast of the discovery, originally abandoned at 6431 feet with stuck pipe, had cleaned down to 1750 feet. It will sidetrack and drill ahead to the present horizon. Second well on the same fee, 1¼ miles northeast of the discovery, is drilling at 4325 feet, after sidetracking around 4000 feet. Total depth is 8044 feet.

The discovery well, American Rio Grande Land & Irrigation Company 3, is flowing 200 barrels per day from sand at 7477-93 feet. It was flowing 150 barrels per day, but an increase in the allowable was granted. The oil is 57.4 gravity, corrected.

Cole Completions Are Disappointing

San Antonio, Texas.—O. W. Killam's A. M. Bruni 36, Bruni townsite area of the Cole field, Webb County, is a 25-barrel an hour producer through choke from sand at 3373-3410 feet. He is drilling Bruni 37 below 3500 feet.

American Liberty Oil Company's Bruni 2-C, showed salt water at 3427 feet and plugged back to 3403 feet, where it again showed some water. It is being plugged back again. If the next plug back job fails to hold, the test likely will sidetrack and re-drill the sand. No announcement has been made, however.

Associated Oil Company's A. M. Bruni 5 has been spudded and Bruni 6 is drilling at a shallow depth.

Highland Oil Company's A. B. Bruni 8 topped the sand at 3387 feet and deepened to 3407 feet, where completion was attempted. The well is showing considerable oil, but will not flow and is being deepened slightly. Same company has several more locations to be drilled immediately.

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HOUSTON, TEXAS

depth and completion will be effected via the gun perforation method.

The well failed to pick up the sand producing at 5500 feet in Plymouth Oil Company's Welder 1-C, discovery well. The new sand, approximately 70 feet deeper, showed high pressure, while the discovery well was a comparatively low pressure proposition.

Location of the test is 466 feet from the north and east lines of Section 45, Welder subdivision, shown on some maps as Montgomery Survey.

Two New Wells Are Completed Near Dinero

San Antonio, Texas.—Two new producers were completed in the McNeill field and another was in process of completion in the North Lucas field, Live Oak County, turning attention to this new district centering around the town of Dinero.

Lion Oil & Refining Company's McNeill Estate 6, southeast offset to the discovery, is flowing a large volume of gas and spraying about 75 barrels of oil per day under a tubing pressure of 1300 pounds and a casing pressure of 1450 pounds. McNeill 7, west offset to the discovery, is making 100 barrels of oil per day under a pressure of 200 pounds on the tubing and 350 pounds on the casing. The first well has the sand at 4358-86 feet, while the latter has the sand at 4401-19 feet.

The above wells bring the total number of oil producers in this field to four. Probably a half dozen rigs will be running in the area immediately surrounding these new wells within the near future inasmuch as several companies hold close in acreage.

Smith and Story's Nueces Valley Townsite 1, north offset to the discovery well, is in sand at 5206-16 feet. Plugs have been drilled and it is now being completed. If a successful producer, it will be the second producer for the North Lucas field, Marine Oil Company's Adair, one mile east of the above well, is drilling around 4000 feet. Houston Oil Company's Cartwright 32, M. Trudo Survey, in the main Lucas field, is drilling below 5400 feet.

Saxet Field Activity Revived

San Antonio, Texas.—Revival of activity in the Saxet field, just west of Corpus Christi, in Nueces County, brings the number of active wells to six, all heading for the 4800-foot sand, which now appears to be a profitable producer.

Magnolia Petroleum Company's Walton 2, Villareal Survey, is in process of completion, after showing 750 feet of oil in 10 minutes on a drill stem test of sand at 4853-60 feet. A. F. Holliday is drilling J. Griffith 1, Section 416, below 3200 feet, and is finishing a fishing job on Stillwell 2, Block 31, Sheppard Farm Lots. Houston Oil Company's Morgan 3, Section 7, has started, and Violet Oil Company's Walton 1, Section 6, is down 2000 feet.

Southern Minerals Corporation's Rand Morgan 1, Lot 29, Eliott Survey, two and one half miles northwest of the field, is coring around 4600 feet.

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Loma Novio Extended 1½ Miles Southwest

San Antonio, Texas.—Loma Novio, new Government Wells sand area in Duval County, looks like a rather low pressure region over its entire producing area. Only a few spots of this large zone have provided producers with an appreciable amount of gas pressure.

Smith and Hamil definitely extended the field another one and one half miles to the southwest through the completion of Hubbard 1, SW SW Section 77. It is flowing about eight barrels of oil per hour from sand at 2664-78 feet. The well makes a large volume of fluid, but the pressure is insufficient to lift the oil out of the hole as fast as it comes in. The well is to be put on pump.

Tex-La Oil Corporation's M. C. Hubbard 1, Section 84, which extended the field one and one half miles to the south several days ago, is going on pump. It has sand at 2795-2803 feet and has a hole full of oil.

Still farther south, and on the north end of the Hoffman field, Bridwell Oil Company's Sutherland 2, Section 122, showed a little salt water with the oil at a total depth of 2780 feet, and has been plugged back.

Northeast of the field, and in the area commonly referred to as North Loma Novio, Humble Oil & Refining Company's J. F. Welder 1-C, Section 73, is pumping 10.4 barrels of oil per hour from a total depth of 2734 feet. Due west of this well, Al Buchanan and Blanco Oil Company's Ruiz 4 failed to pick up the regular sand and was drilling below 3200 feet at last reports.

Deny Texas Stripping Plant Permit to Operate

Austin, Texas.—An order denying the Clymore Stripping plant in the Agua Dulce field a permit to continue operations until August 1, has been issued by the Texas Railroad Commission.

Matson Nixon, receiver for the plant, had applied for the permit, contending that the commission was required to issue it under the provisions of House Bill 266, enacted by the legislature at the session just concluded.

He maintained that this plant should be permitted to operate because there was no market outlet for the gas. This, Nixon contended, was the same situation which faced plants in the Panhandle and in the Pledger field, Brazoria County.

The commission found, however, that there was a market for the gas through United Pipe Line, and that the old sour gas law did not apply to Agua Dulce in the same manner that it applied to the

Panhandle. That bill applied specifically to fields of 300,000 acres or more.

The Clymore plant is the only one in Texas now shut down by a commission order. Another Clymore plant in the Refugio field which the commission has ordered closed is now operating under a stay order from the Third Court of Civil Appeals. Clymore is attacking the shut-down order issued.

South Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BEE COUNTY—		
Caeser Oil Co., R. E. Miller 5, F. Lewis sur (Caeser)	¶25	3035
W. J. Vaughn 1, F. Lewis sur (Caeser)	200	3034
Dirks Bros., R. C. Harris 1, C. A. Dugat sur (Dirks)	500	3898
A. Hartzendorf, Fee 1, 990 ft nl, 4290 ft wl of 200-ac tr, G. A. Kerr sur, 1 mi ne field (Cosden)	35	3648
Stanolind, G. W. Walton 1, sw sec 21 (W. Tuleta)	175	3956
Rual Swiger et al, E. Gardner 6C, F. Lewis sur (Caeser)	*	3045
BEXAR COUNTY—		
N. G. Carter, Bilhartz Bros. 1, F. Rolen sur (Von Ormy)	5	765
CALDWELL COUNTY—		
R. Y. Walker, J. M. Pierce 1-B, S. Seal sur (Dunlap) owwo, old to 2539 ft, dr to 2556 ft, pb 2348 ft	40	2556
DUVAL COUNTY—		
Central Prod., Inc., Wendt 4-A, sec 43 (Gov't Wells)	*	lcn.
Humble, J. F. Welder 1-C, sec 73 (Loma Novio)	250	2734
Magnolia, Duval County Ranch 43, sec 208 (Gov't Wells)	325	2331
C. W. Hahl 9-C, se sec 61 (Gov't Wells)	*	2344
J. T. Johnson 7, nw se sec 44 (Gov't Wells)	20	2337
Sun, Cuellar 8, sec 576 (Sarnosa)	55	2420
Texas, Mucio Vela 3, se sec 42 (Loma Novio)	750	2757
HIDALGO COUNTY—		
H. J. Porter et al, C. E. Smith 1, sh 278, por 40 (Samfordyce) perf 2755-59	1000	2766
Skelly, Seabury 1-A, sh 256, por 38 (Samfordyce)	1750	2813
JIM HOGG COUNTY—		
Edmiston et al (was Van Rossum), C. W. Hellen 1, 330 ft nl and wl sec 48, 1½ mi ne Peyote pool	*	1560
Sun, T. T. East 1, c blk 18, sh 5, Santa Domingo de Arriba gr	*	4226
KARNES COUNTY—		
American Liberty, Wolfmuller 1, J. Johnston sur (Burnell) perf 3292-3303 ft	¶20	3475
LIVE OAK COUNTY—		
Lion O&R Co., P. E. McNeill Est. 6, Dobie sur (McNeill)	75	4386
McNeill 7, Jane Curry sur (McNeill)	100	4419
McMULLEN COUNTY—		
Hall et al, Claunch 1, M. Hely sur (South Calliham)	¶5	784
Motes & Bedingfield, H. L. Lark 8, blk 134, Lark sub, Scrugham sur (Jacob)	75	1027
TRAVIS COUNTY—		
J. M. Hickey, A. Lind 1, 150 ft swl, 820 ft sel of 85-ac tr (Manda area)	*	1230
C. A. Stubbs, J. Kerlin 1, 550 ft swl, 450 ft nwl of 125-ac tr, I. Lindsay sur No. 61	*	1325
WEBB COUNTY—		
Carolina-Texas O&G Trust, Benavides 11, ne sec 683 (Carolina-Texas) owdd, old td 3343 ft	¶2	4996
O. W. Killam, A. M. Bruni 36, sec 6, Arispe Grant (Bruni townsite, Cole)	750	3410
ZAPATA COUNTY—		
Allen & Morris, F. Pena 1, 330 ft sel and swl sh 19, por 19, 4000 ft ne Lopena field	*	2508

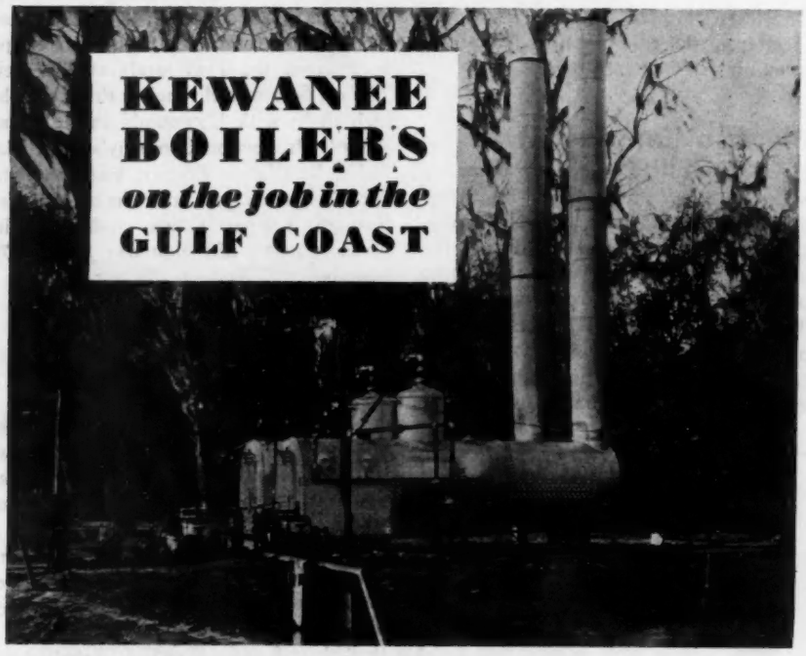
*Failures; †Junked; ¶Mil. cu. ft. gas.

Hardin County

Houston.—Jack Frazier's Sternenburg 1, four miles northwest of Kountz, J. Pearson Survey, Hardin County, was completed as a dry hole at the end of the week at 6897 feet after testing salt water from 6865 to 6870 feet, 6870 to 6895 feet and at 6897 feet.

Calhoun County Test Shut Down at 6522 Feet

Houston.—Continental Oil Company's Moody 2, deep Calhoun County test, is still idle at 6522 feet, following mechanical difficulties, and drilling may not be resumed for two or three weeks. The hole is believed to be open to bottom, since no trouble from heaves had been encountered prior to mechanical difficulties. Shale strata were first cored at about 5800 feet, and drilling of more than 700 feet below the top streak was itself an accomplishment.



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Branches: **Barbers Hill, Kilgore, Greta, Gladewater, Port Lavaca and Tomball, Texas; Lake Charles and Shreveport, Louisiana.**

Third Pierce Junction Vicksburg Is Completed

Houston.—The third producer from the Vicksburg was completed in the Pierce Junction field, Harris County, at the close of the week when Gulf Production Company finished Taylor 39 for 550 barrels per day from 6263 feet.

The oil flow was through a quarter-inch choke with a tubing pressure of 350 pounds and no pressure on the casing. This well was the first well to produce from the Vicksburg under control. The other two producers having been brought in through the drill stem. Taylor 39 will be the forerunner to extensive drilling in the Pierce Junction field.

The test is located 1729 feet north and 75 feet from the east line of J. Hamilton Survey on a 560-acre tract.

Colorado Countuy

Houston.—Gulf Production Company abandoned R. R. Milentz 1, 1¼ miles southeast of Rock Island, I.&G.N. Survey, Section 33, Colorado County, during the past week at 5550 feet after failing to show anything of commercial value.

To the east of Mentz, a Dallas operator has leased approximately 4500 acres which carries a drilling obligation. One of the major oil companies has purchased a spread near the well to be paid when the test is 300 feet in the Cockfield.

It is reported that Danciger Oil & Refining Company has released the old Garwood block where the operators drilled Raver 1, which is now shut down at 6337 feet.

Heeter's Packers and Swabs

For over a quarter century the name of C. M. Heeter Sons & Co. has been known to the oil men of America.

Heeter's Improved Patent Swabs, Corrugated Friction Sockets, Wire Line Pumping Outfits, Sand Pumps and other Gas and Oil Well Materials.

May we send you our catalog showing complete line?

C. M. Heeter, Sons & Co.
(Incorporated)
Main Office and Works, Butler, Pa

Two New East Mykawa Producers

Houston.—Two new producers were added to the East Mykawa field, Harris County, during the past week when Sterling Oil & Refining Company and West Production Company completed one each.

Sterling Oil & Refining Company's (Alkiens) Wagenhauser 1, F. J. Rothass Survey, was completed for 45 barrels per hour from the Frio sands at 4487 feet. The oil flow was through a three eighths-inch choke with 425 pounds on the tubing.

West Production Company's J. A. Platt 1, W. B. Walker Survey, was completed for 17 barrels per hour from 4535 feet through a quarter-inch choke. Tubing pressure was 250 pounds; casing 700 pounds.

Polk County Well Is Dry

Houston.—In the Livingston field, Gem Oil Company's Davis Holmes 7, A. Viesca Survey, Polk County, was completed as a dry hole at 4330 feet after testing salt water at that depth.

The well was drilled to 4330 feet then plugged back to 4325 feet and a drill stem test was made from sands found from 4314 to 4325 feet. The test showed 10 thribbles of salt water and 10 thribbles of oil. The well showed no pressure. The test was made through quarter-inch chokes on top and bottom. It was made in six minutes.

Sun Oil Company's Pratt 3, A. Viesca Survey, Livingston field, was preparing to make a drill stem test at 4255 feet at the end of the week. The well had a showing of oil from 4236 to 4247 feet. The well topped the Cockfield at 4120 feet.

Montgomery County

Houston.—Gholson et al's A. Parker 1, northwest of Willis, J. Lindley Survey, Montgomery County, was shut down waiting on orders at the close of the week and may set casing on the oil sand that was indicated on a drill stem test.

This wildcat showed one joint of drilling mud and one joint of oil and oil cut with mud with a slight show of gas. The test was made in sands found from 3711 to 3769 feet. It was made in 36 minutes through a quarter-inch choke on bottom and a three eighths-inch choke on top.

Salt Dome Found In Walker County

Houston.—A new salt dome was discovered in Walker County during the past week when Boone Brothers' Texas Long Leaf Lumber Company 1-D, M. Milsaps Survey, topped the salt at 3850 feet and drilled into the formation to 3880 feet which established the existence of a salt dome in the area and which will no doubt lead to further exploratory work in this area. This well topped the gypsum at 3772 feet.

At the close of the week the operators were shut down waiting on an electrical logging device.

19 New Gulf Coast Oil Wells Last Week

Houston.—There were 25 completions reported in the Texas Gulf Coast during the past week and of that amount 19 resulted in producing wells with an initial production of 9350 barrels per day. The remaining six completions were reported as failures.

Texas Gulf Coast Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARBERS HILL—		
Yount-Lee, Chambers 28	430	4551
CLAY CREEK—		
Sun Oil Co., Schlottman 6	240	1490
CONROE—		
C. S. Thomas, So. Tex. Dev. Co. 1	*	6312
Strake Pet. Co., Hammond 9	100	5077
Krohn 11	314	5061
Krohn 12	384	5071
HANKAMER—		
Cretaceous Oil Co., Ezzell 3	200	2655
HIGH ISLAND—		
Yount Lee, J. W. Lockhart 1	480	5070
HULL—		
Gulf, Phoenix 108	360	3550
KITTRELL—		
Humble, Shaw 10	*	lcn.
MYKAWA—		
Sterling O&R Co., Wagenhauser 1	1080	4487
West Prod. Co., J. A. Platt 1	408	4535
PIERCE PUNCTION—		
Gulf, Taylor 39	550	6263
RACCOON BEND—		
Humble, Delmar 8 (wo)	20	3543
Hellmuth 6	1608	4105
Sherrod 12	1176	4147
SPINDLETOP—		
Yount-Lee, Gladys City 46 (wo)	240	3170
TOMBALL—		
Continental, Petrich 4	480	5608
Humble, Bloecher 1	590	5562
Hillegest 1	500	5262
Texas Co., A. Ziegler 3	190	5583
COLORADO COUNTY—		
Gulf, Milentz 1, se of Rock Island, I&GN sur, sec 33	*	5550
GRIMES COUNTY—		
Marshall et al's Dodd 1-B, nw of Iola, T. Jones sur	*	2040
HARDIN COUNTY—		
Jack Frazier, Sternenburg 1, nw of Kountz, J. Pearson sur	*	6897
ORANGE COUNTY—		
T. S. Ruff, Kaulback 1, e of Beaumont, J. Armstrong sur	*	2110

*Failures; †Junked; ¶Mil. cu. ft. gas.

Coast's Deepest Well Makes 90 Barrels Hourly

Lake Charles, La.—The Texas Company's Bayou St. Denis 1, Jefferson Parish, discovery well for the deepest producing area on the Gulf Coast, was making between 80 and 90 barrels per hour during the past week while regulating the well on different size chokes. The flow was through a quarter-inch choke and three eighths-inch choke. Tubing pressure was 1530 pounds; casing 850. The oil shows two tenths of one percent basic sediment and water with a temperature from 75 to 90°F. The bottom of the hole is 8572 feet.

The operators are barging the oil out and have to date filled a number of barges. The oil is being taken to the company's refinery at New Orleans.

Bosco Field Is Extended Southeast

Lake Charles, La.—The Bosco field of Acadia and St. Landry parishes was extended further to the south and east during the past week when Superior Oil Producing Company's Larcade 9, was completed as an oil well from the third Marginulina sand. The bottom of the hole is 8717 feet and seven-inch casing was set on the oil sand. At the end of the week the well was making oil but no gauge was available.

The test is located 1600 feet southeast of Prejean 1, which was completed for a nice oil well. With the completion of this test it will add more productive acreage to the field.

The same operators completed V. Prejean 2, at 8570 feet for gas well at the end of the week. No gauge was made of the well and it has now been shut in. This may indicate a fault in this area of the field.

O. Mellencon 3, 400 feet south and 380 feet east of the northwest corner of the southwest quarter of Section 34-8s-3e, was finaled as an oil well from 8622 feet for 51 barrels on the first hour's gauge. The flow was through an eighteen sixty fourths-inch choke.

One of the major oil companies who has only been operating in the Louisiana Gulf Coast for the past year and a half has taken six prospects in that area. The operators have been active and continue to work the area with geophysical instruments and taken additional acreage for protection around the other major prospects .

The operators during the past month have taken a prospect to the south of Jennings. Reflection seismograph was used and after finding a high the operators sent out eight lease brokers to take the block and in two days the block was completed. The prices started at $1.00 per acre and then jumped to $20.00 per acre when a Houston independent operator broke into the play.

The operators have a block at Hayes in Jefferson Davis Parish, Abbeville and South Abbeville in Vermillion Parish, Esterwood in Acadia Parish, South Roanoke in Jefferson Davis Parish and the Jennings prospect in Acadia Parish.

The operators at present have six geophysical crews working in the Louisiana Gulf Coast, two which are torsion balance and the remaining four are reflection seismograph.

English Bayou Well Is Being Completed

Lake Charles, La.—Fohs Oil Company's Castle 2, English Bayou field, Calcasieu Parish, was preparing to be completed at the end of the week. On a 10-minute drill stem test at 7055 feet the well showed 100 pounds pressure and 10 thribbles and one double of pipe line oil. The test was made through a quarter-inch choke. Seven-inch casing was set on top of the oil sand at 7056 feet.

If this well proves as a commercial producer it will extend the field 1000 feet.

IXL Single Reduction Pump Drive

IXL Helical
PUMP DRIVES
"Stand the Gaff"

UNINTERRUPTED oil well pumping service requires a speed reducing drive that can take a lot of punishment. You want this vital link in your pumping equipment to be dependable. See that you get the IXL Helical Trouble-Free drive—specially designed for this exacting service by gear specialists of many years experience.

You can have the heat treated helical gears, the large oversize ball and roller bearings, special alloys, fatigue resisting steel shafts and the built-in stamina of all IXL products by insisting on this trade mark on every pump drive you install. A number of organizations offering complete pumping equipment have standardized on IXL drives. Others can furnish them.

In daily service in East Texas for more than two years, IXL units have not developed a single failure of any kind. Ask for and insist on IXL for your own protection.

These suppliers furnish IXL drives on their pump units. Others will on request.

W. T. Graham, Dallas, Texas.
Welded Tank and Steel Co., Dallas, Texas.
J. W. Beaird Corp., Shreveport, La.
Superior Iron Works, Shreveport, La.
Decker Bros., Electra, Texas.
Bart Products Co., Bartlesville, Okla.

Foote Bros. GEAR AND MACHINE CO.
5301 SO. WESTERN BLVD. CHICAGO, ILL.

Gillis-English Bayou Area an Interesting Geological Study

CHARLES LEYENDECKER

Staff Representative

ONE of the most interesting areas on the Louisiana Coastal region is the Gillis-English Bayou fields of Calcasieu Parish, which are being developed into two major oil pools with one separated from the other by a large fault. The fields are being developed and give indications as ranking along with the other major oil fields of the Gulf Coast.

Gillis Field

The first development in the Gillis area was done by Calcasieu Oil Company and others. Gas seepages led to the discovery of the field. Geophysical work was started seven years ago by Union Sulphur Company, who first worked the area with refraction and then with seismograph reflection. The work being done by McCullom Exploration Company. Torsion balance work also was done by Shell Petroleum Corporation and Gulf Refining Company a few years later.

The first location in an attempt to discover the Gillis field was Union Sulphur Company's Stout 1, Section 36-8s-8w, which was completed as a dry hole at 7998 feet. The refraction picture showed a high in this direction due to the Heterostegina limestone bed being prominent and well developed.

The second location was made for Union Sulphur Company's Barbee Estate 1, Section 1-9s-8w, to the southwest of Stout 1, which also was completed as a dry hole. Its depth was 8125 feet.

The third well to be drilled in the area was Union Sulphur Company's Barbee Estate 2, Section 11-9s-8w, and which was the discovery producing well. The well was completed October 12, 1934, in the Marginulina sands found from 6760 to 6772 feet, the latter depth being the bottom of the hole. The well flowed 500 barrels per day showing a percentage of salt water.

The Gillis field is located seven miles northeast of Lake Charles, centering along the Calcasieu River and parts of Sections 11 and 12-9s-8w. Union Sulphur Company and The Texas Company are the only major lease holders in the field, with Union Sulphur Company controlling approximately 3000 acres with The Texas Company owning around 520 acres in fee, and Fohs Oil Company and Magnolia Petroleum Company owning lesser amounts. The Texas Company purchased the Nickerson land some time ago and used the property for the timber which was cut at a saw mill on the lease for boxes to be used at its refinery. After Union Sulphur Company brought in the discovery well The Texas Company started developing its fee land for oil.

To date Union Sulphur Company has completed nine wells in the area, seven being oil wells and the remaining two failures. The company now is drilling five additional wells and has made location for six more tests. The Texas Company has completed only one well on its property and another is in the stage of completion. This company has one well drilling and four additional locations made.

English Bayou Field

The English Bayou field is located one mile south of the Gillis field and is separated from the latter by a large fault. The field centers around Sections 13 and 14-9s-8w. After the Gillis field was discovered Fohs Oil Company made location for Castle 1, Section 13-9s-8w. The well was drilled to 7067 feet. An oil sand was found at 7042 feet. The well came in February 8, 1935, for 1400 barrels per day through a three eighths-inch choke with 1275 pounds pressure. This well opened a new fault pool in the Louisiana Gulf Coast.

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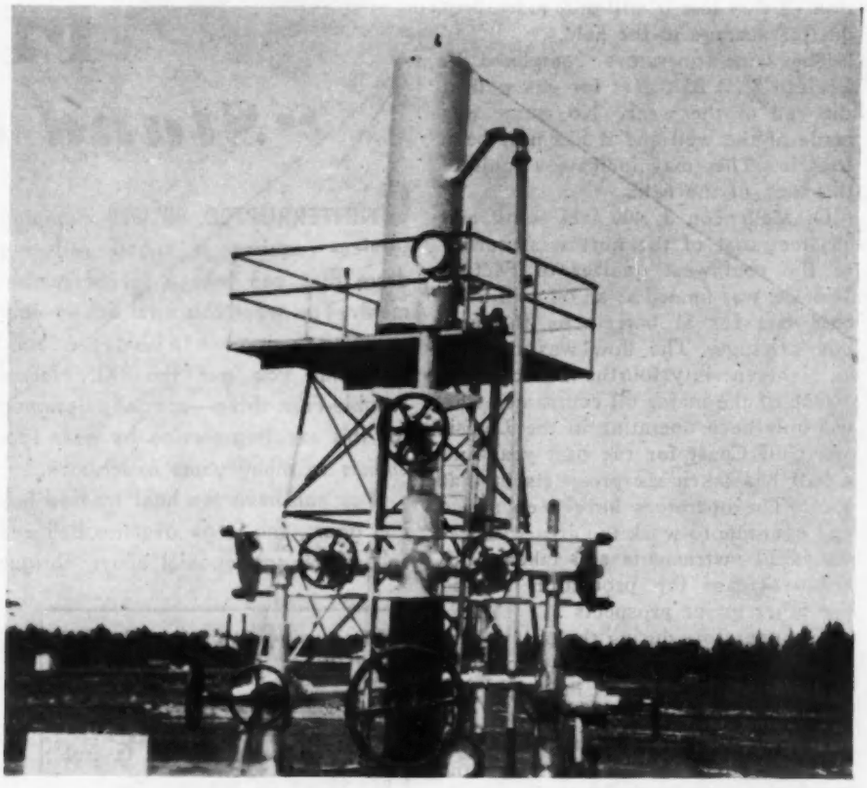
Fohs Oil Company controls approximately 1700 acres in the English Bayou field and has completed only the discovery well as a commercial producer. The discovery well is making around 562 barrels per day on a three sixteenths-inch choke and is showing no signs of water. The company's Castle 2, is being worked



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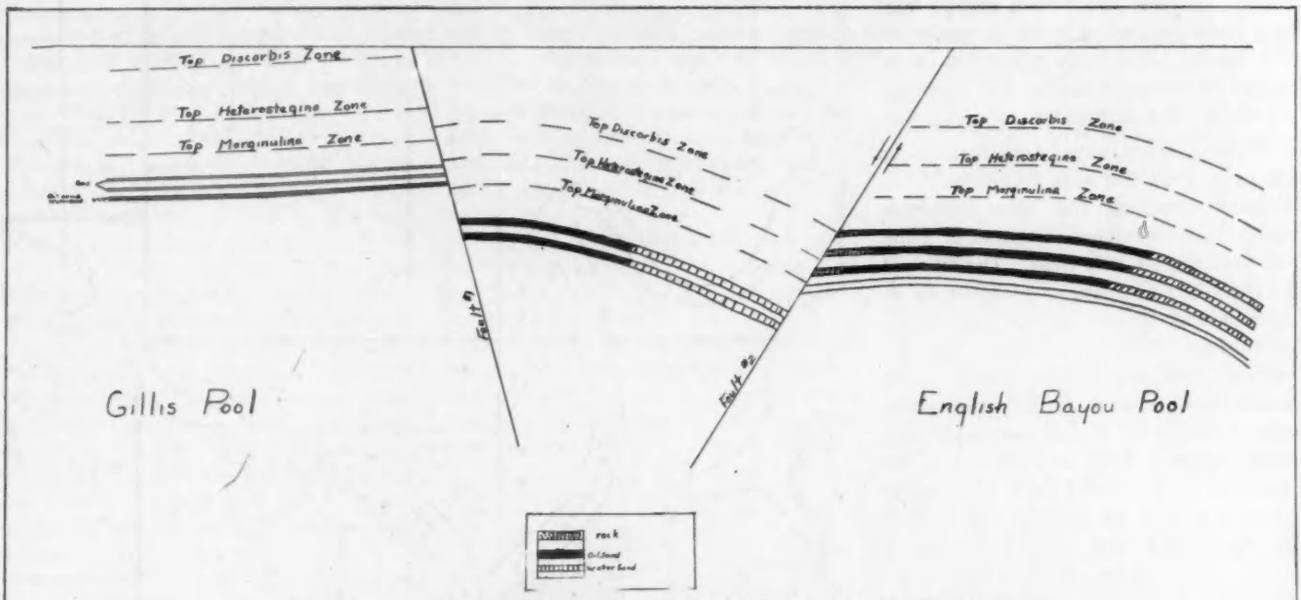

Cross Section, Gillis-English Bayou Field, Calcasieu Parish, Louisiana

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Geological Comparison

The English Bayou area is part of a large salt ridge which includes the Gillis pool, Iowa, Welsh, Roanoke and possibly Lockport fields. This south ridge is expressed by the torsion balance picture as a minimum ridge with apexes at the oil fields mentioned above. Fohs Oil Company, by means of its geophysical work and also by drilling, developed a major fault on the south half of the salt ridge and also radial faults in several tracts.

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These faults have a displacement from 100 to 500 feet and assist in making effective oil traps. One of the unusual effects of faulting in this area is the hardening of these sands to solid rock, making a more effective barrier. This was responsible for the failure of Fohs Oil Company's Castle 3 and 4, which were both on the up-throw side of the fault. The hard sands were demonstrated in Fohs Oil Company's Castle 1, which drilled through 50 feet of this hard formation, and in Castle 2 and 5 the beds were replaced by oil and gas sands.

Important geological markers along the faults in the Gillis-English Bayou fields

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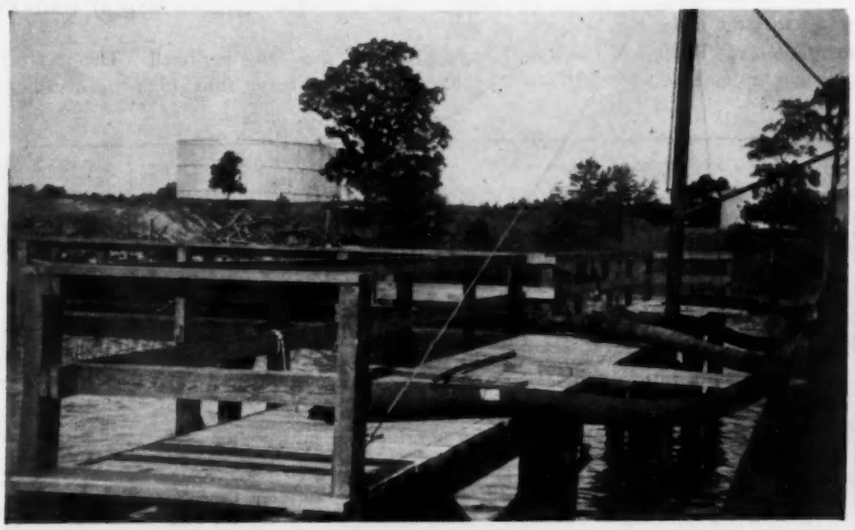

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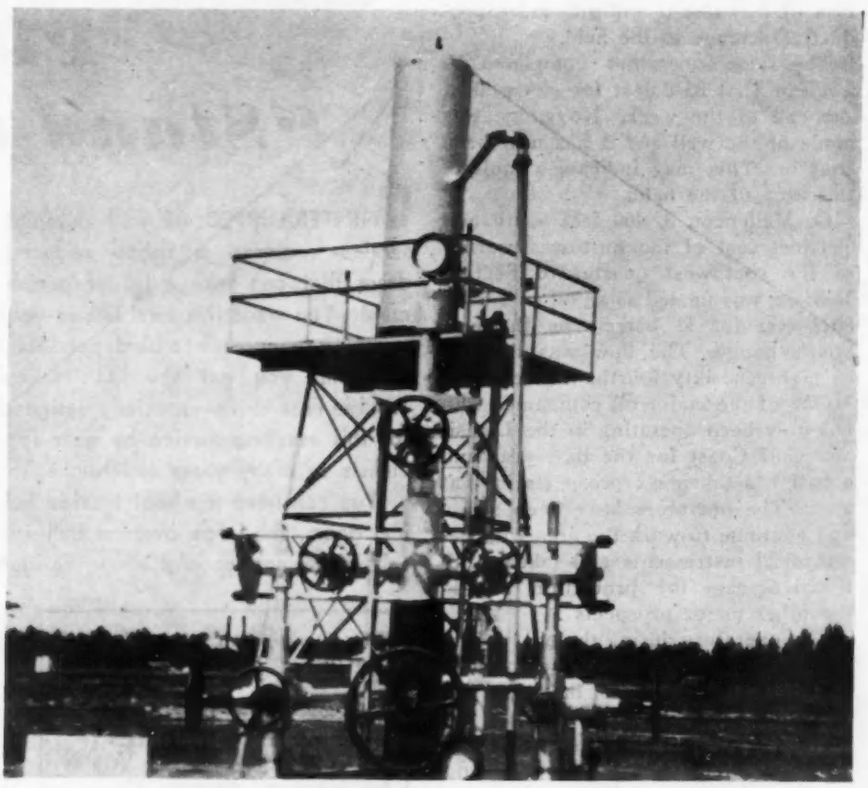

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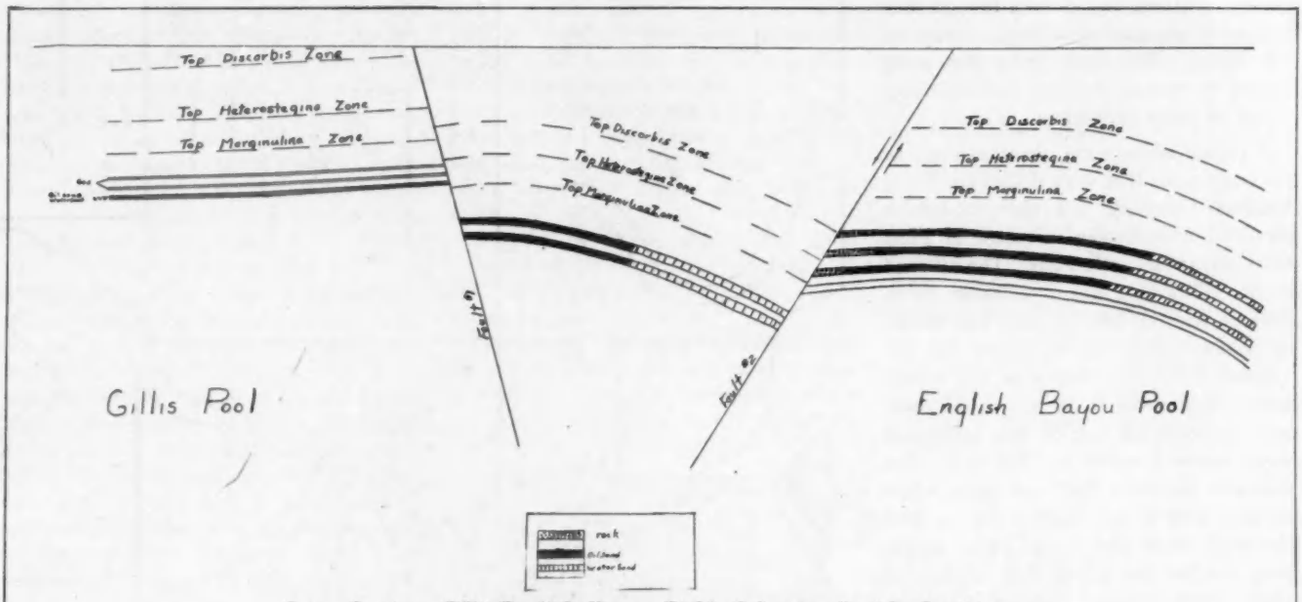

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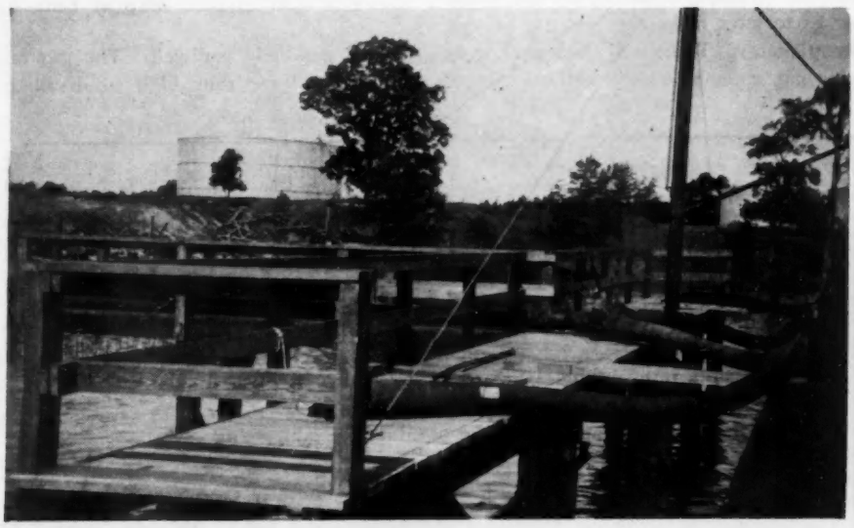


Fohs Oil Company's loading rack on the Old Town Bay and Magnolia Petroleum and Barnsdall Oil Company's tank farm in the background of the picture.

present on these two domes, though they may prove productive in the proximity of the faults. The early tests that were drilled in Section 14-9s-8w, had showings of oil in these formations.

Prolific sands were demonstrated in the early wells that were drilled by Union Sulphur Company and also productive sands of considerable thickness in Fohs Oil Company's Castle wells. The oil sand in the Gillis pool has a thickness up to 23 feet and 12 feet of that has shown saturation. Fohs Oil Company has developed five pay sands on the Castle leases from seven to 35 feet in thickness with evidence of one or two additional sands above a depth of 7300 feet. The sands in the Gillis field are fairly white to gray and in the English Bayou field the sands have been found to be darker gray in color due to the large amount of black chert. Union Sulphur Company has found a water level around 6772 feet. The two fields are producing from the Marginulina formation.

Heavy gas sands are found in The Texas Company's Nickerson Fee 2 and Union Sulphur Company's Mayo Reeves 1, with gas pressures up to 2400 pounds at the tubing head. The oil wells have shown pressures up to 1150 pounds with the oil pressure on Fohs Oil Company's Castle 1 at 1175 to 1250 pounds. Large gas volumes have been developed in Fohs Oil Company's Castle 1, 2 and 5 with pressures up to 1800 pounds in the number one gas sand and 2650 to 2700 pounds on the casing heads and tubing in the number three pay horizon. The number two pay horizon compares favorably in gas volume with Castle 3. It has been difficult to separate the oil and gas in these pay levels at this stage because of the big oil/gas ratio. The operators have started to conserve the heavy gas sands so as to later make the best use of this great energy. These wells indicated probable gas volumes up to 200,000,000 cubic feet of gas daily per well. The gas on the Castle lease runs high in distillate content, being about 30 gallons per million cubic feet of gas.

Map of Gillis-English Bayou Area

The outlook for the productive area in the Gillis field, including the area south of the Buhler fault, may cover some 800 acres, and the English Bayou area probably covers even a greater region. The productive area of the latter pool may exceed that of the Iowa field and also gives promise of exceeding the Iowa field in productive oil sands. The Iowa field is admitted as one of the best paying fields in the Louisiana Gulf Coast to date.

Transportation

Union Sulphur Company is barging its oil to its terminal on the Calcasieu River below Lake Charles, where it has a tank farm. The oil is then sold to Sun Oil

Specifications »

FOR PROPOSALS TO EXPLORE AND LEASE

City of New Orleans Lands in the Parish of LaFourche, Louisiana, comprising approximately Forty Thousand (40,000) Acres, will be received up to June 25, 1935, noon.

Copy of Specifications may be obtained by addressing

FRED W. MATTHEWS
Secretary-Treasurer, Edward Wisner Donation Advisory Committee
C/O CHARITY HOSPITAL, NEW ORLEANS, LOUISIANA

Company. The Texas Company takes its own production and barges it to the refinery at Port Neches. Fohs Oil Company has its allowable sold to Pan American Oil & Refining Company at Destrahand, 22 miles north of New Orleans. The oil is barged down the Calcasieu River from Fohs Oil Company's wharf at Old Town Bay to the Burton tank farm in Burton barges and thence to the refinery. Fohs Oil Company has just completed a loading wharf on the bay and has erected a 10,000-barrel storage tank on the Castle five-acre tract adjoining the Barnsdall and Magnolia Pipe Line Company's tank farm and loading racks. Fohs Oil Company has two 1000-barrel tanks and one 750-barrel gun tank erected on the Castle lease receiving oil from the Castle 1, and now is installing two additional 1000-barrel tanks to take care of the production for Castle 2 and 5.

Production and Drilling Programs

Union Sulphur Company proposes to use seven rigs in the Gillis field and The Texas Company is going to use two rigs while Fohs Oil Company proposes to use a maximum of three rigs. At present Fohs Oil Company has two rigs and Union Sulphur Company two rigs running in the English Bayou field. Union Sulphur Company and The Texas Company's operations are on a very flat area north of the faults which separate the fields, and an intensive development is being undertaken; along the river bed the operators are making locations 600 feet apart. South of this The Texas Company and Union Sulphur Company have undeveloped areas of unusual promise. In the English Bayou field, Fohs Oil Company is drilling its wells 660 feet apart and the same distance from Union Sulphur Company's Castle lease. The cost of drilling in the two fields is comparatively the same, which is approximately $6.50 per foot with the expense perhaps less in the Gillis field due to Union Sulphur Company and The Texas Company drilling their own wells. Drilling is rather easy down to the producing sands and to where the hard sand is encountered. The average time to complete wells in this area is 40 days.

Union Sulphur Company's casing program is to set 10-inch casing around 1358 feet. Six and five eighths-inch Grade C casing is set on top of the producing sands.

Fohs Oil Company usually sets 10¾-inch casing between 1326 feet and 1388 feet, and seven-inch, Grade D casing is set on the producing sand.

The derricks are 122 feet in height and are set on a steel sub-structure approximately eight feet off the ground, which enables the workmen to get under the derrick floor. Regular rotary equipment is being used in the field with two to three boilers furnishing steam.

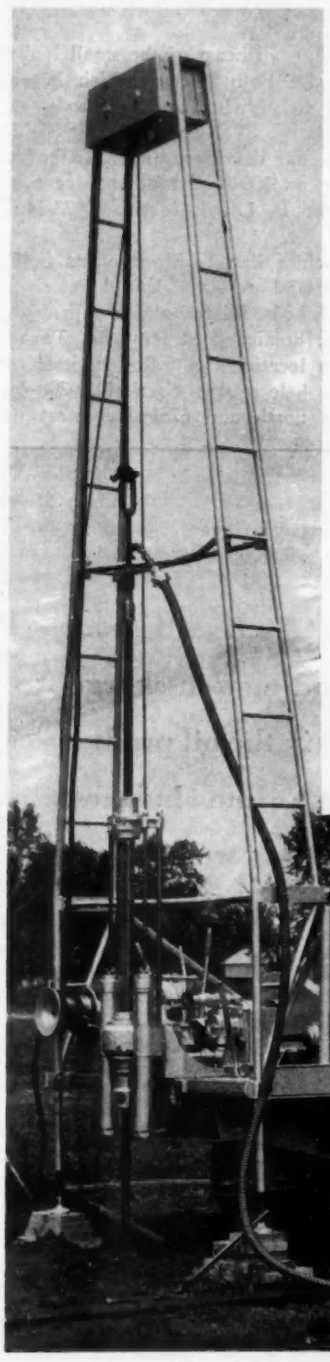
Louisiana Coast Has Quiet Week

Lake Charles, La.—Completions along the Louisiana Gulf Coast during the past week were small in number, with Bosco field, Acadia and St. Landry Parish receiving three of the seven completions in the area. The total number of producers was four. There was one gas well in the Bosco field and the remaining two completions were reported as failures.

Louisiana Gulf Coast Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BOSCO—		
Superior, G. Hernandez 1	351	8716
O. Mellecon 3	482	8622
V. Prejean 2	1	8570
LAKE BARRE—		
Texas Co., St. Lake Barre 32	1900	3802
AVOYELLES PARISH—		
Bell Oil Co., Thompson Kratz 2, Sec 11-2n-5e	*	lcn.
JEFFERSON PARISH—		
Texas Co., Bayou St. Denis 1, se of Lafitte, Sec 19-17s-24e	1100	9572
ST. BERNARD PARISH—		
J. Danciger, Battles 1, (wo) Sec 23-8s-14e	*	7055

*Failures; †Junked; ¶Mil. cu. ft. gas.



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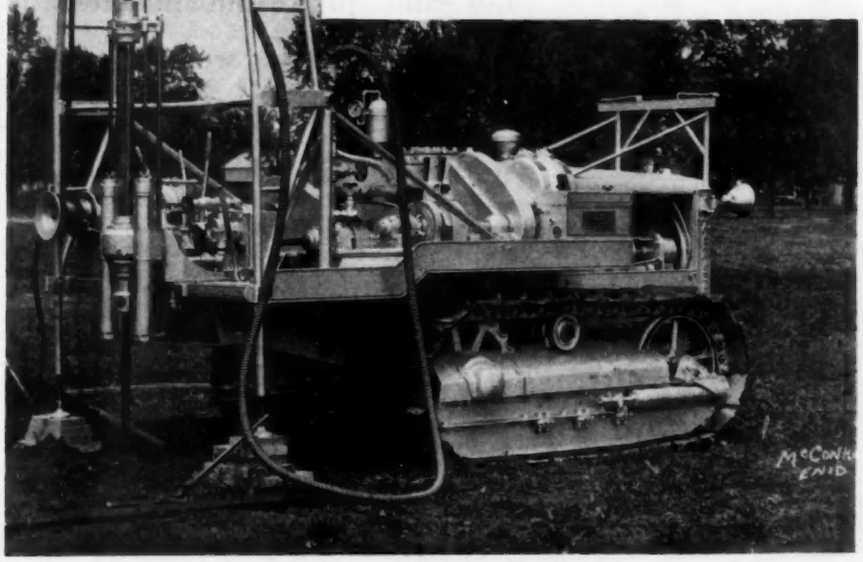

Upward Trend in North Louisiana Wildcat Work

Shreveport, La.—Despite heavy rains that made some locations inaccessible and flooded a few others, North Louisiana drilling activity showed a considerable upward trend last week with announcement of 11 new locations, and the assembling of wildcat blocks for several other contemplated operations.

Five new locations were made in Caddo Parish, including one which is one and one half miles northwest of the shallow Blanchard gas field. This is J. T. Reese and associates' J. B. Waskom 1, 330 feet south and west NEc 30-19n-16w. The other three Caddo tests were in the Pine Island field as follows: Industrial Manufacturing Company's Muslow 1, NWc NW SE 5-20n-15w; Shreveport Oil Corporation, Muslow B-5, Section 4-20n-15w; and The Leonard Company, M. A. Dickson 1, located 1650 feet south and 1200 feet east NWc 36-21n-15w.

Franklin D. Hyde and associates of Longview, Texas, have assembled a 4500-acre block in southern Caddo Parish, and have derrick up for Thigpen-Herold 1, NWc NW SE 5-15n-15w, for a 3000-foot test. This is in the Keatchie district where two wildcat tests, one in Caddo and one in De Soto Parish, have reported oil shows and run formation testers recently slightly below 2600 feet. In the same area but in De Soto Parish, A. F. Tarver of Shreveport recently paid $5500 for 1100 acres in Sections 2-13n-16w, and 35-14n-16w. Considerable trading in smaller blocks has gone on in the last fortnight around these two tests, one of which is in Section 4-14n-16w, Caddo Parish, and the other in Section 20-14n-16w, De Soto Parish.

Two miles northeast of the small Holly oil field, De Soto Parish, which has a combined daily yield from five wells of 190 barrels, C. T. Ruffin of Mansfield, Louisiana, has derrick up on a 1200-acre block for a 3000-foot test, the location being Elmo P. Lee 1, NW SW 33-14n-13w.

In Ouachita Parish, Monroe gas field, on state land recently leased in river and bayou beds, Farrell and Company of Louisiana, domiciled at Houston, Texas, made two locations as follows: State of Louisiana 4, located in Section 50-20n-4e, 3316 feet north and 6751 feet west of common corners of Sections 26, 49 and 25; and State of Louisiana 5, Section 49-20n-4e, located 1693 feet east and 125 feet north of NWc of Section 22-20n-4e.

In the shallow Urania field, La Salle Parish, that produces from the Claiborne-Wilcox contact slightly below 1500 feet, H. L. Hunt, Incorporated, which has considerable production in this field, has derrick up for King A-1, NW NE NW 36-10n-1e.

In the Zwolle field, Sabine Parish, The Texas Company made location for Mary Cutrer 1, SE NE 11-7n-11w.

In Union Parish, near the Arkansas line, and five miles east of the old Oakland shallow field, that produced for a few months from a few wells in 1922-23, Southern Production Company last week spudded a wildcat test, W. E. Clark 1, SEc NW NW 17-22n-1e. Ten-inch surface casing was cemented at 40 feet.

Two and one half miles northwest of production in the Bellevue field, Bossier Parish, and centering around the village of Bellevue, T. E. Bird and Hearn Harper of Shreveport are assembling a block of several thousand acres centering in SWc 32-20n-11w, for an early test.

Near Homer, Claiborne Parish, B. F. King of Homer and J. H. Lester of New York have assembled a 6000-acre block centering in Section 17-21n-7w, for a 3300-foot test.

For a consideration of $12,000 cash, Tooke and Reynolds of Shreveport have sold to J. R. Querbes of Shreveport a seven-twelfths interest in SE NE and SW NW 15-20n-15w, on which they have several producers in the recently opened northeast offshoot of the Pine Island field, and a quarter interest in SE SW NW 15-20n-15w.

Sligo Outpost Tests At Important Depths

Shreveport, La.—United Gas Public Service Company last week was drilling at 4378 feet and preparing to start coring for the 4200-foot gas sand of the lower Cretaceous in the Sligo gas field, Bossier Parish, in R. V. Kerr Unit 1, NEc 24-17n-12w, three quarters of a mile east of the three 4200-foot gassers in that field.

Three quarters of a mile southwest of production in this horizon in that field, Triangle Drilling Company was drilling at 3578 feet in State of Louisiana 1, NWc 23-17n-12w. Both of these tests recently failed to find production in the 2800-foot gas horizon of that field, which recently was uncovered.

United Gas Public Service Company's Young 1, Section 21-23-n-16w, a test in the Rodessa gas field, Caddo Parish, last week was drilling lime and chalk at 4334 feet.

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Catahoula Parish Wildcat Shows Gas

Shreveport, La.—Phillipi and associates' Louisiana Central Lumber Company A-1, Section 2-9n-6e, a wildcat in Catahoula Parish, east central Louisiana, half a mile southwest of a test that recently blew out making gas and salt water at 916 feet, last week tested an estimated 2,500,000 cubic feet of gas at 948 feet and was shut in waiting orders. Six-inch casing had been cemented at 820 feet. The formation is identified as Jackson.

18 Drilling Permits Issued in Louisiana

Shreveport, La.—Eighteen drilling permits were authorized last week by the minerals division, Louisiana Conservation Commission. Eight for North Louisiana were divided among the following parishes: Bossier, one; Caddo, one; Morehouse, two; Ouachita, two; and Sabine, two. Those in South Louisiana were divided among the following parishes: Calcasieu, four; Cameron, one; Iberia, four; and Plaquemines, one.

Two North Louisiana Commercial Completions

Shreveport, La.—Two commercial wells, one a 290-barrel pumper in the Zwolle field, Sabine Parish, and the other a gasser in the Union Parish part of the Monroe gas field, which gauged 12,132,000 cubic feet of gas with 848 pounds of rock pressure, were included among North Louisiana's seven completions last week. Two wildcats in Bienville Parish and one near Vivian, Caddo Parish, were included among the failures.

North Louisiana Completions

Company, Well and Location	Init Prod. Bbls.	Depth
BIENVILLE PARISH (Saline)—		
N. V. Duncan et al, J. Hutton 2, nw ne sw 4-18n-7w	*	2845
Saline Drlg. Co., Pardee 1, ne se ne 27-14n-6w	*	3819
CADDO PARISH (Blanchard)—		
Barbare & Seigal, Sharpe 1, nw ne nw 10-18n-16w	*	912
CADDO PARISH (Vivian)—		
W. T. Bell, Bostick 1, sw se sw 12-22n-16w	*	2785
GRANT PARISH (Urania)—		
C. & S. Oil Corp., Swope 1, sw nw 17-9n-1e	*	1618
SABINE PARISH (Zwolle)—		
Monroe Prod. Co., Bowman-Hicks 2, ne ne 3-7n-12w	290	2790
UNION PARISH (Monroe)—		
Southern Carbon Co., Fee 67, 5-20n-4e	¶12¼	2140

*Failures; †Junked; ¶Mil. cu. ft. gas.

Two Keatchie Area Wildcats Test Shows

Shreveport, La.—Two wildcat tests in the Keatchie district, three miles apart, one in DeSoto Parish and one in Caddo Parish, were watched last week as formation tests were made in each slightly below 2600 feet.

A. D. King, Trustee's A. D. Roach 1, (second hole), Section 4-14n-16w, Caddo Parish, after missing one drill stem test, ran formation tester again from 2636-78 feet and tested seven thribbles of mud with a show of gas and was arranging to deepen. The formation was tentatively identified by one paleontologist as lower Cretaceous. King recently released the block around this test with the proviso he will continue to 4000 feet unless production is found above.

In DeSoto Parish, E. B. Bird and associates after testing dry at 2613 feet in Tokio were later washing with oil and may run liner. Casing was cemented in this test at 2583 feet.

Two New Starts In South Arkansas

El Dorado, Ark.—Two drilling permits were authorized last week by the Arkansas Board of Conservations as follows: Miller County—Magnolia Petroleum Company, El Dorado, Arkansas, E. V. Olivet 8, located 330 feet west and south NEc NW NW 3-16-26; Union County—Marine Oil Company, El Dorado, Union Sawmill 3, 330 feet west and south NEc SE SE 3-18-13.

To Again Plug Back Rainbow City Deep Test

El Dorado, Ark.—A second effort to complete H. L. Hunt, Incorporated's E. F. Gregory 15, SE SE 10-17-14, a deep test in the Rainbow City field, Union County, in the Big Lime formation, ended in failure last week. After a string of five-inch casing had been cemented at 6450 feet the well was tested and showed 3000 barrels of salt water daily. Total depth is 6911 feet

Arkansas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
COLUMBIA COUNTY (Stephens)—		
Gold Oil Corp., B. Wepfer 1, sw se nw 24-15-20	*	1465
LAFAYETTE COUNTY—		
Lary Romine, Nolte 1, ne ne nw 11-19-26	*	3516
UNION COUNTY (Rainbow City)—		
J. E. Crosbie, Inc., H. D. Warren 1, ne sw sw 10-17-14	240	3338
UNION COUNTY (Urbana)—		
Marine Oil Co., W. B. Thompson E-4, ne nw ne 10-18-13	150	3583

*Failures; †Junked; ¶Mil. cu. ft. gas.

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in Permian rock salt. This is the second deepest test ever drilled in Arkansas. The well will again be plugged back to 3478 feet and casing will be perforated at 3450 feet for another test of the Taylor sand, a previous test in that formation after plugging back having been unsuccessful.

Elevation is 180.4 feet. This test logged base of red beds at 5937 feet and top of the Permian chalk at 6816 feet. Seven-inch casing had been cemented at 5834 feet.

Gulf Refining Company's 8000-foot test on the west side of the Smackover field, Werner Lumber Company 49, SW NW SW 5-16-16, Union County, last week was drilling red shale and lime at 6318 feet.

Half of Arkansas' Four Completions Dry

El Dorado, Ark.—Arkansas had four completions last week, of which two were commercial oil wells and two were failures. A shallow test in the Stephens field, Columbia County, was abandoned as a salt water hole at 1465 feet and a wildcat in La Fayette County, on a 5000-acre block, was abandoned as a dry hole at 3516 feet.

Both oil wells were in Union County, one in Rainbow City, which is flowing 500 barrels of fluid daily from the Taylor sand at 3338 feet, of which 240 barrels is oil; and the other in Urbana, a 150-barrel daily pumper.

Jackson Gas Field Is Extended Eastward

Jackson, Miss. — Approximately 600 acres were added to the producing limits of the east side of the Jackson gas field in Rankin County, when Cleve Love and associates' Boehle 1, NE NW NE 18-5n-2e, was completed at 2453 feet in Midway chalk, gauging 35,604,000 cubic feet of gas; elevation is 275 feet. Top of chalk was 2448 feet (corrected depth). Cane River was logged at 720 feet and Wilcox at 1030 feet.

A wildcat in Jones County, Snow-Black Petroleum Company's Fox 1, SE SE SW 30-7n-12w, was abandoned as a dry hole in Wilcox at total depth of 4300 feet. This was the third test by this company on this block of acreage.

Mississippi Completions

Company, Well and Location	Init Prod. Bbls.	Depth
JONES COUNTY—		
Snow-Black Pet. Co., Fox 1, se se sw 30-7n-12w	*	4300
RANKIN COUNTY (Jackson)—		
Cleve Love et al, Bohle 1, ne nw ne 18-5n-2e	¶35½	2453

*Failures; †Junked; ¶Mil. cu. ft. gas.

Monument Well Makes Heavy Flow; Cooper Field Extended

Hobbs, N. M.—Largest oil producer in New Mexico outside the Hobbs field was completed the past week on the Monument structure, Lea County's newest field, and the productive limits of the Cooper field were extended 1 1/3 miles to the north, thereby paving the way for the drilling of more than a dozen additional tests.

The Monument field gained a higher rating when Amerada Petroleum Corporation's State 1-F, C SW SW 36-19s-36e, second completion for the structure and a north offset to the discovery well, responded to acid treatment with an open flow gauge of 552 barrels of 31 gravity sulphur oil the first hour and 509 barrels the second hour. The gas volume was at rate of 7,348,000 feet daily. Producing from porous lime at 3805-3903 feet, or 309 feet below sea level, this well was rated at five barrels per hour prior to treatment with 2000 gallons of acid solution. The well gauged 596 barrels in 4½ hours through open 2½-inch tubing, carrying 150 pounds working pressure on tubing and 1000 pounds on seven-inch casing cemented at 3798 feet. Its proration quota for the current period is 145 barrels daily. Rotary rig is being moved to a third location for the company. The Texas Pipe Line Company is serving the area with a six-inch line extended from the Eunice field.

Shell Petroleum Corporation's State 1-E, a west offset to this new producer, has cemented 9⅝-inch pipe at 2450 feet. Sun Oil Company has awarded drilling contract for the drilling of W. B. Malveety 1, a north offset to this active test, while Superior Oil Company (California) has erected derrick to drill a south offset. The Texas Company's Saunders 1, C SE SW 18-19s-37e, situated 3½ miles northeast of production, has drilled to 1900 feet, and is registering a lower structural position, based upon upper markers.

Extension of the Cooper field to the north was attained the past week when Humble Oil & Refining Company et al's J. L. Coates 1, C NW NE 10-24s-36e, flowed seven barrels of oil per hour on drill stem test at 3563 feet, or 260 feet below sea level. This outpost blew out at 3370 feet last October, and was out of control for about six months, making a large volume of gas daily. Split casing and junk in the hole made it necessary to drill a relief well to the west and flood the gas zone with water to kill the flow of gas. A dip in the structure is indicated by this test in logging top of brown lime at 2995 feet, or 388 feet above sea level, being 119 feet lower than the nearest producer. However, it is only 85 feet lower structurally on depth comparisons.

Four separate injections of acid solution, involving an aggregate of 13,000 gallons, was used by Samedan Oil Company (was Capitan Oil Company) in bolstering the potential rating of Turner 2, Hobbs townsite location, from a natural flow of 80 barrels hourly to 13,876 barrels oil and 13,420,000 feet of gas daily. Production is from lime at 4125-4204 feet, or 587 feet sub-sea.

A blow out at Byrd-Frost, Incorporated's S. J. Wells-Conoco 1, SEc SE NW 12-25s-36e, North Jal field, while drilling in at 3325 feet, or 126 feet below sea level, cost the life of Howard Scott, 29, a member of the crew on duty in the cellar. He was asphyxiated, or drowned. The well made a heavy flow of gas and spray of oil, but was brought under control within a few hours, having previously cemented seven-inch pipe at 3300 feet.

Sulphur water appeared with oil and gas showings developed from a series of drill stem tests made above the 3966-foot level in the Lea County wildcat of Rowan Drilling Company and N. G. Penrose, Fort Worth, on the E. M. Elliott-Conoco permit, C NE SW 17-22s-37e, three miles southwest of the town of Eunice, and seven miles southeast of the Eunice field. Heavy gas production generally expected in this area was not encountered. The hole may be deepened.

Contractors operating rotary rigs in the Cooper field are finding it unprofitable to drill and complete wells in the 3500-foot lime at the prevailing Lea County footage price of $4.50, with $1.50 per foot extra when providing their own fuel and water. Prolific high pressure gas production encountered in the upper section of the lime, topped between the 2750- and 3050-foot level, offers a major hazard for blow outs. This condition is further aggravated by the presence of carbon dioxide gas, which quickly freezes drill pipe unless rotated constantly. Several contractors have sustained heavy losses as result of mishaps in this troublesome gas zone. High pressure gas in the upper lime is also found at Eunice, Hobbs and Monument fields, all active drilling

centers, but the total footage is 400 to 700 feet greater, making it possible for contractors to average down their costs.

Allowable production for the Hobbs field was fixed at 30,859 barrels daily, or a gain of 38 barrels, for the last proration period in May, according to revised production quotas furnished by C. G. Staley, umpire. Other east Lea County fields were reduced from 146 to 145 barrels per well, while those incapable of making the top allowable are not restricted.

Plugging orders have been issued for Repollo Oil Company and Anderson-Prichard Oil Corporation's B. W. Arnold 1, SWc NW SE 11-20s-38e, a wildcat five miles south of the Hobbs field. Small volume of oil with sulphur water resulted from treatment with 3000 gallons of acid in saturated lime at 4510-4628 feet, or 1061 feet sub-sea, and in deepening to 4757 feet more water was encountered. Warren L. Todd and The Texas Company's Fred Cole 1, C NE NE 35-19s-33e, four miles northwest of nearest production, has lowered seven-inch casing to 3600 feet to shut off sulphur water found in projected oil horizon at 3513-18 feet, and will deepen to try for production in what is termed the Eunice lime zone, due near the 3850-foot level.

Rock River Test Shows in Sundance

Rock River, Wyo.—The Sundance sand has yielded Ohio Oil Company another pool—its third within six weeks. This time in the old Rock River field near here in Carbon County.

The company's Harrison-Cooper 10, NE NE SW 35-20n-78w, an old well, cored into 88 feet of saturated sand in the Sundance between 3108-3196 feet and indicates to make a large pumping well. The sand lacks gas pressure to flow the well. Crude from the horizon tested 33 gravity. Pumping equipment is being installed to test.

This is the first test of the Sundance formation in the Rock River field, which has produced 15,000,000 barrels of oil from the Muddy, Dakota, and Lakota sands since its discovery 16 years ago. It is believed that the field will yield a like production from the Sundance.

The Sundance sand has proved one of the most prolific horizons in the Mountain States. In 1922 it caused a strong revival of drilling in the great Salt Creek field when Midwest Refining Company brought in an 8000-barrel well in the first test of the Sundance in that field. Two years ago the Sundance yielded Colorado's only flush field when The Texas Company developed gusher production in Iles Dome field in Moffat County.

Eastern Colorado Looked Upon With Much Favor

Denver, Colo. — A deal was consummated here recently between Gypsy Oil Company and the Union Pacific Railroad in which the oil company has leased mineral rights consisting of nearly a million acres of prospective oil and gas land in Eastern Colorado along right of way. Plans call for an expenditure close to $750,000 in geophysical surveys of this land.

The company has two magnetometer crews surveying along the right-of-way in Cheyenne and Kiowa Counties, and will explore land, running north and south 20 miles along the right-of-way in Lincoln, Cheyenne, Kiowa, and Kit Carson Counties. The land is part of the United States grant to the railroad. Surface rights were sold to settlers, but mineral rights on all odd sections retained.

Gypsy Oil Company's crew makes the sixth geophysical outfit working in Eastern Colorado. Colorado Geophysical Corporation has a party shooting in Township 3 South, Range 45 West; Townships 3, 4, and 5 South, Range 47 West; Township 6 South, Range 48 West; and Township 11 South, Range 45 West. Ohio Oil Company's crew is shooting in Township 18 South, Ranges 50 and 51 West.

Indian Territory Illuminating Oil Company has two seismograph parties in the field, shooting in Townships 7 and 8 South, Ranges 33 and 34 West, and in Townships 3 and 4 South, Range 50 West; and Township 9 South, Range 48 West. This company recently completed eight core holes scattered through Township 21 North, Range 48 West; and Township 20 North, Range 49 West.

Eastern Colorado is looked upon by oil men to be the most promising undeveloped area in the Rocky Mountain region because of the similarity of geological conditions with the Mid-Continent area. In Northeastern Colorado, the most promising oil strata are the Muddy, Dakota, and Lakota sands, all of which produce oil in Wyoming. In Southeastern Colorado, these sands are eroded or near the surface, and the best possibilities are in the Pennsylvanian and Ordovician series, which are similar in character to formations of that age which carry oil in Western Kansas. Both of these horizons are within reach of the drill. Heavy overlying uncomformable surface formations have caused little evidence of surface geology in Eastern Colorado, and until the advent of the seismograph Eastern Colorado has been given little consideration.

Discovery of oil in Scott County, Kansas, 60 miles east of the Colorado line, last fall has considerably stimulated interest in the territory.

Mountain States Completions

MONTANA

Company, Well and Location	Init. Prod. Bbls.	Depth
GLACIER COUNTY—(Cut Bank field)—		
Texas Co., Schlag 3 sw se 26-35n-6w.	260	2840
WYOMING		
ALBANY COUNTY—		
California Explor. Co., Holst 1, ne se 13-17n-77w	400	3227
NEW MEXICO		
EDDY COUNTY—		
Stoval & Marshall, Rose 2, cne sw 28-24s-27e	*	2335
SAN JUAN COUNTY—		
Webb Holding Co., State 1, ne nw 6-30n-11w	*	1485
*Failure.		
LEA COUNTY (Cooper Field)—		
Gen'l Crude Oil Co.-Magnolia, C. D. Woolworth 1, c nw se 26-24s-36e	5000	3509
LEA COUNTY (Eunice Field)—		
Continental & California Co., State 4-C-20, c se sw 20-21s-36e	1000	3965
LEA COUNTY (Hobbs Field)—		
Capital Oil Co., Turner 2, se¼ 34-18s-38e	13,876	4204
LEA COUNTY (Monument Field)—		
Amerada, State 1-F, c sw sw 36-19s-36e	13,200	3903
LEA COUNTY (Wildcat)—		
Repollo-Anderson-Prichard, B. W. Arnold 1, swc nw se 11-20s-38e..	*	4757

*Failures; †Junked; ¶Mil. cu. ft. gas.

Wyoming's Big Light Oil Producer Waits Equipment

Medicine Bow, Wyo.—The California Company and Ohio Oil Company cored into 30 more feet of heavily saturated sand and stopped without passing out of the second bench of the Sundance formation in Kyle 1, NE SE 26-21n-79w, on Big Medicine Bow Dome, eight miles southwest of here.

It is believed that the well will make from 10,000 to 15,000 barrels daily if opened up when completed. A week ago the well tested 165 barrels of 63 gravity crude gasoline on drill stem test at 5299-5361 feet. The test now is shut down awaiting special equipment to complete. Company officials expect to have the well on production within two weeks. A 5 3/16-inch production casing will be run to the top of the first bench of the Sundance at 5151 feet and liner will be run into the second bench. Perforations in the liner will be set opposite the first bench at 5151-5222 feet where the well developed an aggregate of 62,000,000 cubic feet of wet gas. Tubing with packer set in liner between the first and second benches will be run into the oil sand. The 63

gravity crude will be produced through the tubing and the gas around the tubing and bradenheaded off through the five-inch string.

The well is the largest wildcat strike in Wyoming, and is considered the most significant development in Rocky Mountain oil history since the discovery of the Salt Creek field 20 years ago.

Cut Bank Production All Being Marketed

Cut Bank, Mont.—Voluntary proration in the Cut Bank field here this week lifted as the Montana Pipe Line Company began purchasing 100 percent from all its accounts and a long impending break in the Northern Montana crude oil price structure has been averted. The field is producing at capacity of around 5000 barrels daily. Increased runs by Canadian refiners has automatically straightened out the marketing situation, and it is expected under the present increase in Canadian demand that a raise in price will be forthcoming.

Three new wells started drilling in the field this week. The Texas Company has two new operations under way, Mable Morrison 2-M-357, NWc NW 22-35n-6w, drilling at 295 feet, and Aronson 1, CN½ SE 21-35n-6w. R. C. Tarrant is rigging up cable tools for Ruetten-Wold 1, CNW NE 13-34n-6w.

Mountain View Work Is Showing Decline

Los Angeles.—Only 15 wells are drilling at Mountain View in Kern County with two wells ready for production tests. Three other wells are nearly ready to spud. Operations have declined in this field the past two to three months and it is doubted if over 12 wells will be drilling three months from now. The formation is tricky and quite a little trouble is had in completing clean wells.

A. T. Jergins Trust's Huckeba 5 in Section 24-30-28, with bottom at 5761 feet, is on a production test with 8⅝-inch cemented at 5550 feet. Mohawk Petroleum Company's Eisen-Vineyards 2 in Section 24-30-29, stopped drilling in oil sand at 5309 feet, after cementing 8⅝-inch at 5174 feet. Liner, including 154 feet of perforated, was landed at 5294 feet and oil is being circulated.

Union Oil Company's Kernco B-1, Section 9-30-28, an edge test, is drilling at 7717 feet in sand and shale, taking frequent cores. The company is drilling two other wells in the field. Standard Oil Company is drilling one well and is building rig for another, while Shell Oil Company is starting a new hole.

Majors of California Showing Drilling Spurt

Los Angeles.—That the major companies of California will drill far more wells in the state this year than last is indicated by recent field reports. For the week ending May 18, there were 20 wells completed with a total flush production of 11,925 barrels. Four of the major companies completed 13 of the 20, and their combined initial was 8905 barrels.

A check of a drilling report for the same week for California showed that six major companies were drilling 84 wells, including wildcats and redrilling jobs. These same companies are credited with 50 locations and rigs.

The drilling wells are distributed as follows: Standard Oil Company, 26 drilling; Shell Oil Company, 20; Union Oil Company, 18; Associated Oil Company, 12; General Petroleum Corporation, 5, and The Texas Company, 3.

For the week ending May 11, major companies are credited with 10 of the 33 permits for new wells in the state.

The major companies have large holdings in the older fields of the state, and it is apparent that undrilled acreage is to be developed. This is especially true of Mount Poso, a comparatively shallow field, and at Dominguez. Shell Oil Company and Union Oil Company will push their drilling campaigns at Dominguez for the next several months.

Independent operators are in the majority at Long Beach, but at Santa Fe Springs, new operations are in the hands of the majors. Standard Oil Company and Kettleman North Dome Association will increase operations slightly at Kettleman Hills and Associated Oil Company and Shell Oil Company are expected to increase drilling at Ventura Avenue.

Several wildcats are drilling in the state where there is thought to be gas, and at least two potential gas fields have been found since the first of the year. The new rule as to excess gas production at Kettleman Hills has drawn attention to the coming need for new sources of gas and it is likely two gas lines will be built during the year, to tap new fields. Formerly fields in Los Angeles basin could be depended upon for all gas necessary for Southern California, but this is not true now.

The feeling that present known oil and gas reserves are not sufficient for the future is spurring on the new drilling on the part of the majors. The depression wiped out most of the small independent operators, and the burden of seeking new oil and new fields is largely on the shoulders of the majors.

California Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
LONG BEACH—		
Bush Oil Co., Hillseth 2-A	65	4630
Coast Ridge Oil Co. No. 1	375	4125
N. Y. K. Oil Co., Henshaw 3	450	4440
Union, L. B. C. 26	130	4740
DOMINGUEZ—		
Shell, Reyes 65	375	4864
Union, Callender 37	880	6946
Hellman 35	1375	4500
INGLEWOOD—		
Shell, Rindge 17	1700	3291
EAST COYOTE—		
Bartholomae Oil Corp., Stern 2	150	3717
SANTA FE SPRINGS—		
Union, Bell 77	70	4448
VENICE—		
Dunlap Pet. Co., No. 1	1500	6785
WEST COYOTE—		
Standard, Emery 58	1130	5974
M. C. 121	1365	5920
EDISON—		
A. T. Jergins Trust, Hershey 4	150	1485
Shell, "21" Com. 1	190	4981
KERN FRONT—		
Associated No. 32	200	2217
MOUNT POSO—		
Shell, Vedder 24	915	1830
Vedder 25	240	1732
Union, S & M 23	515	1932
MESA—		
Interstate Inv. Co., No. 1	150	2129
EDISON—		
Mohawk Pet. Co., Edison-Seal 3-25	*	3545

*Failures; †Junked; ¶Million cu. ft. gas.

Belridge Deep Test Flowed 1220 Barrels

Los Angeles.—Standard Oil Company's McPhail 1-A, Section 36-27-20, in the North Belridge field in Kern County, was good for 1220 barrels of 32 gravity oil, cut 40 percent, when tested with bottom at 8618 feet. String of 9⅝-inch is cemented at 8379 feet. It is expected plug will be placed on bottom in effort to shut off the water before another production test is made. Standard Oil Company is drilling McPhail 2 at 7320 feet with 11¾-inch at 5470 feet, and location has been made for McPhail 3.

Union Oil Company is preparing to drill a deep test in this field which will offset Continental Oil Company's Result 2, an old well now producing 60 barrels of light oil from 5457 feet.

Belridge Oil Company's No. 32 in Section 35-27-20 in this field is drilling at 5250 feet in oil sand and its No. 33 is drilling in brown shale at 4700 feet. No. 28 was spudded May 12. In these wells 16- or 16½-inch is usually cemented at 700 to 760 feet, making it possible to land 11¾-inch at close to 5500 feet.

25 Wells Are Drilling In Playa Del Rey Field

Los Angeles.—With 25 wells drilling in the Playa del Rey extension of the Venice field, seven are below 6000 feet, and three are due for early completion.

Dunlap Petroleum Company's No. 2 test refused to flow and when placed on the compressor, made 1500 barrels of 23 gravity oil, cut 2.4 percent. It is bottomed at 6785 feet and 6⅝-inch casing was cemented at 6470 feet. This hole had a total of 234 feet of good looking oil sand. The production is now 800 barrels of clean oil. Another hole has been started.

Another disappointment for the field is the tapping of a gray sand thought to contain water by Lor-Mar Oil & Development Company's No. 1 with bottom at 6870 feet. The hole will be plugged back 150 feet, leaving open only 30 feet of oil sand. A string of 6⅝-inch casing is cemented at 6650 feet.

Union Oil Company's Vidor 9 stopped drilling at 6310 feet after cementing 6⅝-inch at 6030 feet and ran 491 feet of 4¾-inch liner to 6305 feet and cemented through perforations at 6067 feet.

Petrol Corporation's Del Rey 1, has been redrilled to 6470 feet in oil sand, which was picked up at 6460 feet. The same company's Ben 2 is drilling in shale at 5825 feet. Colly Oil Company's Colly 1 is drilling at 6540 feet, after picking up the oil sand at 6526 feet.

Manhattan Beach Test Looks Like a Dry Hole

Los Angeles.—The wildcat drilled near Manhattan Beach in Los Angeles County, probably is another dry hole. Bethlehem Exploration Company's Martin 1, Section 30-3s-14w, was drilled to 6921 in schist. Bottom of the schist was soft and similar to the conglomerate present in the old Venice field. It is thought the bottom of the hole is just above the base rock. A formation tester was run, but the recovery was unimportant.

Well at Elwood Flows From Top of the Sespe

Los Angeles.—Barnsdall-Rio Grande Oil Company's Permit 88-10 at Elwood in Santa Barbara County started flowing 1070 barrels of 43 gravity clean oil and 750,000 cubic feet of gas from only 30 feet of pay formation, top of the Sespe. This is the first well at Elwood to produce from the Sespe zone, since the discovery well for this zone was lower on the structure.

The hole was drilled to 3616 feet and 13⅜-inch was cemented at 3530 feet. The flow was through the casing with no liner or tubing in the hole. It has been killed and will be completed in regular manner.

Only three other wells are drilling in the field, but the action of the new Sespe producer is expected to start more activity.

New Completions in Crystal Area Expected

Mt. Pleasant, Mich.—First completions in the Crystal district of Montcalm County since the Leonard-Durbin discovery well, 10n-5w-11, was brought in for 5000 barrels initial at 3198 feet on March 28, probably will be made this week.

The north offset, Eastern Gulf's Barger 1, 10n-5w-2, Montcalm County, set five-inch casing at 3178 feet and expected to make a Dundee lime test the last of the week. Two other tests, J. W. Leonard, Jr., West 1, and Daily Crude Oil Company's Tow 1 also were cased.

New regulations handed down May 17 by Conservation Director P. J. Hoffmaster require that operators in the Crystal area cement the six-inch casing string through the Lower Marshall (1200-1300 feet) and cement in the long five-inch string in the producing formation, Dundee, about 3150 to 3200 feet. The order also requires that after cementing the long string that operations be suspended for 72 hours. Operators also are required to equip wells in the district with a master gate and control head of 2000-pound pressure test.

Seventy-eight locations had been made in the Crystal district up to May 20 with 32 active rigs on this date. Tests extend over a five-mile square area and appear likely to prove up more territory or condemn it in faster time than in any previous Michigan play.

Michigan Completions

MIDLAND COUNTY—

Company, Well and Location	Init. Prod. Bbls.	Depth
Atha Oil Co., LaLonde 1, 13n-1e-27	*	3490
McClanahan Oil Co.'s Hoyt 2, 13n-1w, sw sw se 18	300	3420
Northrup 2, 13n-1w-20	50	3430
Pure Oil Co., Bond A-5 13n-1w-ne se sw-7	60	3440
Novak A-4, 14n-2w-nw se se-7	35	3553
ISABELLA COUNTY—		
Atha Oil Co., Haley 16n-4w, c-ne sw-31	¶½	1490
Guy M. Obenauer, Lovell 1, 14n-6w, c sw nw-14	¶1½	1370
OGEMAW COUNTY—		
Webber Oil Co., Horsel 1, 22n-2e, se se sw-28	40	2710
Arthur Morris, Golf Club 1, 22n-2e-sw se sw-20	70	2730
Gordon Oil Co., Lally 1, 22n-2e, ne nw sw-19	70	2765
J. W. Leonard, Heintz 1, 22n-1e, sw ne ne-24	45	2790
MUSKEGON COUNTY —		
Reed Oil Co., Fagan 1, 10n-16w-sw se sw-10	*	1920

*Failures; †Junked; ¶Mil. cu. ft. gas.

Eastern Fields Completions

PENNSYLVANIA

Company, Well and Location	Init Prod. Bbls.	Depth
GREENE COUNTY—		
Carnegie Nat. Gas. Co., Lemley 1	¶	3095
George Isinninger 2	¶	3763
Russell Johnson 1	*	3420
WASHINGTON COUNTY—		
Turman, Nuss & Co., Keys 1	¶	3307
Duquesne Gas Co., Dague 2	25	....
Union O&G Co., McCoy 1	*	....

WEST VIRGINIA

BOONE COUNTY—		
Pond Fork O&G Co., Cole & Crane 20	¶	1026
CALHOUN COUNTY—		
Dudley Lutz & Co., M. E. Spoon 1	¶	2220
L. P. Bickel, Martha Stump Hrs 15	¶	1917
H. S. Adams & Co., Ivey Gainer 1	¶	1250
CLAY COUNTY—		
United FG Co., Sam Samples 4549	¶	1841
RITCHIE COUNTY—		
Joseph Elder & Co., I. M. Jackson 1	¶	2042
Russel Morris & Co., A. C. Scadden 1	*	1995
P. E. Deem & Co., W. Clark Hrs. 2	*	1910
Patton-Wilson Farm Oil Co., Patton & Wilson 7	¶	1981
G. A. Smith & Co., L. H. Hanlon 4	20	....
Creed Barker, W. P. Barker 5	1	1859
Godfrey L. Cabot, Beaver Coal 6	¶	2016
ROANE COUNTY—		
Clyde Campbell & Co., Hart 1	8	....
K. M. Hunt & Co., T. J. Murray 1	¶	....
PLEASANTS COUNTY—		
Howard Hall & Co., Thos. Fleming 1	6	1800
MASON COUNTY—		
Mason Oil Corp., Smith & Petty 3	2	547
GILMER COUNTY—		
All Penn O&G Co., J. A. Kelley 1	6	....
KANAWHA COUNTY—		
Virginian G&O Co., J. F. Brown 18	20	....
MINGO COUNTY—		
F. H. Yates, Vance & Workman 2	*	1510
WIRT COUNTY—		
W. C. Patterson, Vandervender 24	¶	....
Service Oil Co., W. B. Hill 1	*	....
WOOD COUNTY—		
John Leaton & Co., E. C. Morehead 1	¶	1877

SOUTHEASTERN OHIO

NOBLE COUNTY—		
G. M. Harper & Co., John Shafer 3	*	780
WASHINGTON COUNTY—		
Knob Oil Co., Beatty Hrs. 1	3	1120
S. J. Bogard, Wilber Swingle 1	3	1032
Montgomery & Miller, Geo. Montgomery 12	5	1080
Ohio Fuel Gas Co., J. F. Lynch 1	¶	1053
McCoy & Locahary, L. L. Hale 3	1	589
Harold Dailey & Co., Zumbro 1	¶	1055
Lawrence Hrs. 1	*	....

INDIANA FIELDS

DAVIESS COUNTY—		
Mid-West Dev. Corp., Gilley 1	¶	....
George W. Friendly 2	*	678
KNOX COUNTY—		
Gardner Pet. Co., Effie Taylor 1	¶	....
Burton Bland 1	¶	....
M. E. Blann, C. E. Beard 1	¶	....
National Consumers Co., Yates 1	50	....
PIKE COUNTY—		
Claud Noble, Edward Adams 3	¶	....
Midwest Dev. Corp., Pile 1	*	1612
GIBSON COUNTY—		
Claud Noble, Edward Adams 3	¶	....
PIKE COUNTY—		
Indiana Southwestern Gas Corp., G. W. Decker 1	*	....
WABASH COUNTY—		
Warren K. Shoemaker, Williams 1	*	....
JAY COUNTY—		
Amber Oil Prod. Co., F. E. Davis 17	*	....
PERRY COUNTY—		
Rome Oil Co., Henry Dutchke 1	*	1230
HARRISON COUNTY—		
James H. Kraft, Sid Elbert 1	*	....
VANDERBURG COUNTY—		
J. S. Young, Jr., Frank E. Keck 1	*	....

*Failures; †Junked; ¶Mil. cu. ft. gas.

Drilling Reports on Important Wildcats

CALIFORNIA

KERN COUNTY

ALPAUGH—Trico O & G Co.'s No. 4, 3-25-23, rig.

ARVIN—General's Mattson 1, 1-32-29, fsh 4140 ft. Di Giorgio 1, 17-31-30, dr 708 ft.

BELRIDGE—Continental's Maylan 1, 7-28-20, coring 4151 ft.

CALIENTE—Woodward Oil Co.'s Batz 1, 36-29-29, to recement 8⅝ in 466 ft td 617 ft; S. P. 2, 31-29-30, co to bottom 497 ft, to pump.

COMANCHE POINT—Tejon Ridge Oil Co.'s No. 1, 23-32-29, coring hard sand 1942 ft.

EDISON — Mountain View. Dev. Corp.'s Spangler 1, 12-30-28, to test on pump 5122 ft. Woodward Oil Co.'s Goldberg 1, 36-29-29, sd 285 ft.

GRAPEVINE—Silver Gate Oil Co.'s Tejon 1, 7-10-19, rur.

GREENFIELD—Big McKittrick Oil Co.'s Houghton 1, 7-31-28, dr 6340 ft.

KERNELL—Standard's Rideout 1, 34-24-23, rig; Widgeon 1, 1-25-23, td 3256 ft, to set 6⅝ in. 3156 ft Widgeon 2, 12-25-23, dr 2338 ft.

LOST HILLS—Standard's United 1, 2-26-29, dr 3857 ft.

SEMITROPIC—Fullerton Oil Co.'s No. 27, 14-27-23, wocs 13⅜ in 510 ft, bottom; No. 76, 1-27-22, wocs 13⅜ in 516 ft, bottom. Standard's Chapman 1, 9-27-23, lcn; Goldman 1, 5-27-23, testing 2708 ft; Towle Estate 1, 7-27-23, rig.

SOUTH DOME—Continental's Gatchell 28-7, 7-25-20, coring shale 5990 ft.

TEMBLOR HILLS—Robt. Foster's No. 1, 2-32-22, dr 2850 ft.

WHEELER RIDGE—Reserve O & G Co.'s Tejon Ranch 1, 2-10-9, td 3708 ft redr. 2699 ft, wocs 6⅝ in 2664 ft.

KINGS COUNTY

ALPAUGH—Trico O & G Co.'s Magee & Stone 3, 36-24-22, sd 4821 ft.

MISCELLANEOUS

FRESNO COUNTY—Milham Explor. Co.'s Oro Loma 1, 12-12-11, dr gray sand 5085 ft. Russ Oil Syn's No 1, 28-12-11, sd 5115 ft. Taft Well Dr. Co.'s Kreyenhagen 1, 33-22-16, dr hard sand 1450 ft.

HUMBOLDT COUNTY—Texas Co.'s Eureka 1, 1-3-2, sd 5948 ft.

SACRAMENTO COUNTY—Great American Pet. Co.'s Howard 1, 25-2-8, dr hard gray sand 2960 ft.

SAN JOAQUIN COUNTY—Amerada's F. D. L. 1, 15-2-5, coring hard shell 4478 ft.

TEHAMA COUNTY — Northern Counties Pet. Co.'s Ewers-Mooney 1, 25-24-3, coring shale 4126 ft sg.

TULARE COUNTY—Kabella Oil Co.'s No. 1, 12-23-27, dr granite 775 ft. Kings River Oil Pools' No. 1, 29-16-23, dr slate 3250 ft.

MONTERREY COUNTY—Shell's Branch 1, 34-24-10, dr sand and shale 1481 ft.

ABBREVIATIONS

The following abbreviations, signs, etc., are used in completions and wildcat reports in THE OIL WEEKLY.

* —*dry hole abandoned well.*	owdd —*old well drilling deeper.*
‡ —*salt water (completions).*	owpb —*old well plugging back.*
† —*junked and abandoned.*	pb —*plugged back or plugging back.*
¶ —*million feet of gas.*	r —*reaming.*
abd —*abandoned.*	rog —*rig on the ground.*
bbls —*barrels.*	rur —*rigging up rotary tools.*
br —*building rig.*	rust —*rigging up standard tools.*
b.s. —*basic sediment.*	sd —*shut down.*
csg —*casing.*	sdtr —*sidetracking.*
co —*cleaning out.*	sg —*show gas.*
dd —*drilling deeper.*	si —*shut in.*
dk —*derrick.*	so —*show oil.*
dr —*drilling.*	so & g —*show oil and gas.*
fsg —*fishing.*	spd —*spudding.*
ft —*feet.*	sr —*straight reaming.*
hfw —*hole full of water.*	sw —*salt water.*
in —*inches.*	td —*total depth.*
lcn —*location.*	ur —*underreaming.*
m —*milling.*	wih —*water in the hole.*
mim —*moving in materials.*	wo —*workover.*
mit —*moving in tools.*	wocs —*waiting on cement to set.*
mot —*milling on tools.*	wosr —*waiting on standard rig.*
n, s, e, w, —*north, south, east, west.*	
oih —*oil in hole.*	

SANTA BARBARA COUNTY

GOLETA—West Elwood Oil Co.'s Simonds-Campbell 1, 9-4-28, tested wet sd 3700 ft.

LOMPOC—M. J. Freeman's La Brea 1, 11-7-33, dr 720 ft. Lompoc Pet. Co.'s Beauterbough 2, 18-7-34, td 3510 ft, wocs 4¾ in at 3310 ft.

NAPLES—Scully & Snyder's No. 1, 7-4-29, sd 6445 ft.

SANTA BARBARA—M & L Oil Co.'s Domerick 1, 29-4-27, sd 1995 ft.

SAN LUIS OBISPO COUNTY

CHOLAME—Willett Oil Assn.'s Jack 2, 10-25-15, sd 3647 ft.

VENTURA COUNTY

BARDSDALE—El Rancho Oil Co.'s Elkins 1, 9-3-19, dr sand and shale 1082 ft. Union Oil Co.'s Dryden 1, 12-3-20, dr 1840 ft.

CONEJO—International Oil Vev.'s Powell 1, 33-2-20, trying to pump 3060 ft.

HOPPER CANYON—Oil Ridge Oil Co.'s Moran 3, 1-4-19, r to bottom 1603 ft, to deepen.

LAS POSAS—Las Posas Pet. Co.'s Mahan 1, 22-3-20, fsh 8120 ft.

OJAI—Continental Oil Co.'s Pirie 1, 12-4-23, td 2241 ft, plug 1544 ft, pumping 214 bbls, cut 94%.

PIRU—Bachman Pet. Co.'s No. 14, td 5050 ft, to set casing.

SANTA PAULA — High Mesa Oil Co.'s Butcher 1, 16-4-22, dr shale 502 ft. Edw. M. Lesperance's Boosey 1, 31-4-20, dr sand 1556 ft.

SANTA SUSANA—American Dr. Co.'s No. 11-A, 31-3-17, sd 550 ft.

SESPE—E. R. McClellan's No. 1, 4-4-19, rig. Supreme Oil Co.'s No. 1, 1-4-20, dr shale 253 ft.

SHIELDS CANYON—Henry R. Dabney's McGuire 1, td 500 ft hauling in material, to validate hole. Texas Co.'s Shiells 128, 4-3-19, straightening hole, 6708 ft.

SIMI—Dawson Oil Co.'s No. 1, 8-2-17, tested wet, sd 1910 ft. Paloma Oil Co.'s Paloma-Marr 1, 12-2-18, dr hard sand 1034 ft.

SOUTH MOUNTAIN—Calco Pet. Corp.'s No. 2, 17-3-20, dr sand 570 ft.

SOUTHERN CALIFORNIA

ARTESIA—Vanco Dev. Co.'s Millard 1, 25-3-12, coring shale sg, 3656 ft.

BANDINI—West American Oil Co.'s Bandini 1, 17-2-12, rur. Western Gulf's Vail 1, 16-2-12, dr sand and shale 3765 ft.

BREA CANYON—Pressel-Perry-Tull's Baird 1, 30-2-9, sd 4176 ft.

EL SEGUNDO—Republic Pet. Co.'s No. 1, 18-3-14, sd 5004 ft.

FAIRVIEW—Explorers Dr. Co.'s Norris 1, 9-6-10, sd 960 ft.

HUNTINGTON BEACH—Black Eagle Oil Co.'s No. 1-B, permit 194, 32-5-11, co, 4702 ft.

MANHATTAN BEACH—Bethlehem Explor. Co.'s Martin 1, 30-3-14, top schist 6755 ft, td 6921 ft. May abn.

NEWPORT—Si Rubens' No. 1, 14-6-10, sd 2574 ft. Wilshire Oil Co.'s Newport 1, 29-6-10, dr 550 ft.

PICO—Frontier Oil Co.'s No. 1, 12-2-12, dr sand and shale 3650 ft.

SAUGUS—Barstow Oil Co.'s Walker 1, 35-5-16, sd 3312 ft. International Oil Dev.'s Powell 1, 34-5-16, td 4339 ft, flowing gas and water.

SAN BERNARDINO COUNTY — Great American Pet. Co.'s Gapco D-1, 18-2-8, dr 735 ft.

SAN DIEGO COUNTY—San Diego Gas & Pet. Corp.'s No. 1, 32-18-2, td 6332 ft, flowing 350 bbls. water.

COLORADO

ADAMS COUNTY—Riddle Pet. Co.'s Baxter 1-C sw 2-3s-66w, Derby Dome, dr 930 ft.

BACA COUNTY—J. H. Everett et al's Test 1, nw nw nw 24-32n-48w, rig up.

BOULDER COUNTY—Leslie R. Steele et al's Maxwell 1, sw ne nw 24-1n-71w, dr 917 ft near top of objective, the Dakota sand.

GRAND COUNTY—Colorado Oil Ref. Co.'s Linke 1, ne sw sw 13-1n-77w, rigging up to resume at 1820 ft.

JACKSON COUNTY—Continental's Hoye 3, ne 34-9n-78w, South McCallum structure, reaming and straightening hole 2275 ft, td 2297 ft.

LINCOLN COUNTY—Consolidated Smelting & Metals Corporation's Hancock 1, nw nw se 7-17s-52e, treating with acid to remove junk that could not be fished out, td 1190 ft.

PARK COUNTY—South Park Oil Co.'s State 1, se se sw 16-11s-17w, co 1415 ft.

PROWERS COUNTY—Trojan O & G Co.'s Lotus 1, nw ne ne 15-23s-46w, Lamar district, fsg for tools at 5227 ft.

WYOMING

CARBON COUNTY—Ohio and California Co.'s Kyle 1, ne se ne 26-21n-79w, preparing to run liner with td 5393 ft. Well tested 165 bbls. per hour 63 degree gravity oil in second Sundance at 5209-5361 ft. Earl W, Reader, Inc.'s Whitford 1, sw se se 24-20n-84w, dr 4500 ft.

CONVERSE COUNTY—Chadron-Osage Oil Trust's State 1, cne 16-32n-69w, dr 500 ft.

WASHAKIE COUNTY—Yale Oil Corp.'s Blakesley 1, ne ne nw 28-49n-91w, dr 1760 ft.

WESTON COUNTY — Beaver Creek Oil Synd.'s State 1, ne ne 23-44n-63w, mim.

138,100 ft. 6-inch Standard 19-lb. pipe, line couplings and complete pumping station. 2—150 H.P. De La Vergne oil engines, direct connected to 2—5½"x16" Gould triplex vertical pumps, 1000 pound pressure, vacuum pump. All necessary equipment 2—24' x 80' steel buildings with overhead cranes in each. All pipe and equipment in station same as new. Will sell all or any part. Located in Kay County, Oklahoma, 4 miles south of Tonkawa on Highway 177. 60,000 ft. 19-in. O.D. welded pipe and 40,000 ft. of 16-in. O.D. welded pipe. Cash or terms. Wire, phone, or write.

SONKEN-GALAMBA CORPORATION

64-108 North Second Street **Kansas City, Kansas**

MONTANA

CARBON COUNTY—Continental's Orr 1, sw nw se 18-5s-17e, resuming 2948 ft. Round Butte Oil Co.'s Bailey 1, cel ne se 3-6s-32e, dr 400 ft.

CHATEAU COUNTY—John Decker's Mills 1, ne ne 29-27n-13e, rig.

FERGUS COUNTY—H. C. Rowland's Woodward 1, se se sw 20-14n-24e, dr at 3095 ft.

GALLATIN COUNTY—Montana Gas & Petroleum Co.'s Tice 1, nw nw nw 28-1s-2e, resuming 1400 ft.

PHILLIPS COUNTY—Grant Smith et al's Phillips 4, e½ nw sw 2-24n-23e, dr 371 ft. Guy Norman's Pewitt 1, ne nw ne 20-24n-24e, dr 638 ft.

ROSEBUD COUNTY—Birney Oil & Gas Co.'s Fee 1, sw sw sw 6-6s-42e, dr at 323 ft.

LIBERTY COUNTY—J. H. Hamilton Syn.'s Northern Farms 1, cne sw 10-37n-5e, dr at 2660 ft.

TOOLE COUNTY—Fraser & Cluth's Severance 1, cse ne 29-32n-2e, dr 750 ft. Kyle's Clark 1, nw se 24-37n-1e, sd 1010 ft.

NEW MEXICO

EDDY COUNTY—Coronado Oil Co.'s Anderson 1, cne nw 18-20s-28e, sd 1462 ft. Dooley & Shank's McClay 1, cne se 33-18s-30e, dr 280 ft. Getty Oil Co.'s Dooley 7, sw nw 24-20s-29e, Twin Hills structure, dr 4815 ft. in gray sand and black sandy shale. Stocal & Marshall's Rose 2, cne sw 28-24s-27e, abd 2335 ft.

OTERO COUNTY—Flynn, Welch & Yates Donohue 1, cnw ne 28-24s-15e, Sacramento Creek, dr 1110 ft.

SAN JUAN COUNTY—Continental's Rattlesnake 44, nw ne nw 12-39n-19w, lcn. Webb Holding Co.'s State 1, ne nw 6-30n-11w, abd 1485 ft.

LEA COUNTY—Amerada's State 1-F, c sw sw 36-19s-36e, Monument area, elev 3594 ft, top anhydrite 975 ft, salt 1220-2280 ft, flowed 5 bbls hourly natural from lime 3903 ft, treated with 2000 gals acid and gauged 1060 bbls oil in two-hour flow test. Anderson-Prichard Oil Corp.'s Brett-Conoco 1, c se nw 7-20s-35e, Monument area, lcn; Fisher 1, c se ne 8-20s-35e, elev 3690 ft, top anhydrite 1945 ft, top salt 2000 ft, dr 2300 ft. Amon G. Carter et al's G. H. Mattix-Conoco 1, c se nw 3-24s-37e, elev 3258 ft; top anhydrite 1090 ft, top salt 1225 ft, top brown lime 2547 ft, dr 3340 ft. R. H. Henderson et al's P. J. Langley 1, c se se 8-25s-37e, elev 3162 ft, top salt 1205 ft, making gas, lost two strings tools, td 2875 ft, dry by junk. Humble's J. L. Coates 1, c nw ne 10-24s-36e, elev 3383 ft, salt 1314-2947 ft, top lime 2995 ft, so and g 3420 ft, dr 3440 ft; J. L. Coates 1-A, relief well, elev 3385 ft, top anhydrite 1324 ft, top salt 1433 ft, sdo 3394 ft. Jeffers Oil Co. (R. H. Henderson's) C. M. Carlson-Conoco 1, c nw se 27-25s-37e, dr 310 ft; A. N. Etz-Conoco 1, c ne sw 12-21s-32e, cemt 8¼-in cas 1801 ft; Jiminez-Conoco 1, c sw se 11-20s-33e, ur 10-in cas, td 955 ft. Maljamar O&G Corp.'s P. Miller 1, c nw sw 23-17s-32e, elev 3992 ft, top anhydrite 790 ft, top salt 955 ft, good show o and g, dr 3830 ft. Nat'l Securities Oil Corp.'s V. Linan 1, nec s½ sw 33-18s-37e, elev 3712 ft, top anhydrite 1580 ft, logged salt 1716-2650 ft, top lime 2956 ft, pb from sulphur water at 4506 to 4238 ft, used 3000 gals acid and tested 300,000 ft gas, sd for second acid treatment. Ohio's State-McDonald 3, c nw se 16-22s-36e, elev 3562 ft, top anhydrite 1450 ft, top brown lime 3060 ft, dr 3475 ft. Repollo Oil Co.'s B. W. Arnold 1, swc nw se 6-20s-32e, elev 3567 ft, top anhydrite 1540 ft, logged salt 1637-2695 ft, used 3000 gals acid 4628 ft, no results, dry and abd 4757 ft. Rowan-Drilling Co. & Neville G. Penrose's E. M. Elliott-Conoco 1, c ne ne sw 17-22s-37e, elev 3400 ft, top anhydrite 1070 ft, tested sulphur w and show o and g in lime 3881 ft, dr 3920 ft. Shell's State-Endura 1, c se ne 12-21s-35e, elev 3588 ft, top lime 3020 ft, pb from hfw 4404 to 3926 ft, used 3000 gals acid, then swabbed 80 bbls 5 hrs, with 2 percent bs and w; State 1-E, c se se 35-19s-36e, Monument field, dr 2500 ft. Sun Oil Co.'s W. B. Mavely 1, c ne se 35-19s-36e, Monument area, lcn. Superior Oil Co. (Cal's), State 1, c ne ne 2-20s-36e, Monument area, rig. Texas Co.'s Saunders 1, c se sw 18-19s-37e, Monument area, dr 1500 ft. W. L. Todd & The Texas Co.'s Fred Cole 1, c ne ne 35-19s-33e, elev 3603 ft, top salt 1540 ft, top white lime 3250 ft, salt and sulphur water at 3513-18 ft, ur 7-in cas, td 3600 ft. Sam K. Vierson & Brown's W. D. Robinson 1, c nw se 14-11s-32e, elev 4355 ft, rig.

MICHIGAN

MIDLAND COUNTY — J. V. Wicklund's Neal 1, 16n-2w-13, testing so 4026 ft. Goll-Graves-Mechling's Oviatt 1, 16n-2e-24, sd 3300 ft. Atha Oil Co.'s Moran 2, 13n-13-28, rig.

ISABELLA COUNTY — McClanahan Oil Co.'s McRae 1, 15n-3w-13, sp. United Driller's Vandercook 1, 13n-3w-24, dr 2000 ft. Atha Oil Co.'s Fordyce 1, 16n-5w-34, rig.

OGEMAW COUNTY — Thompson Bros.' Mills Est. 1, 21n-4e-31, dr 2200 ft. Lupton Oil Co.'s Rakestraw 1, 24n-3e-35, lcn. Durham & Jones' Farro 1, 21n-3e-13, dr 250 ft.

GLADWIN COUNTY—Beaverton Oil & Gas Co.'s Ross 1, 17n-1w-7, sd 3870 ft. Sun Oil Co.'s Hines 1, 17n-1w-31, testing so 3998 ft. Strange Oil and Gas Co.'s Spicer 1, 17n-2w-11, dr 600 ft.

MECOSTA COUNTY — Jetter Oil Co.'s Parsley 1, 14n-10w-19, dr 2750 ft. Jasmid Oil Co.'s Coopersville Bank 1, 13n-10w-19, sd 1250 ft, sg. Sherman Drilling Co.'s Scheibe 1, 15n-7w-13, dr 1000 ft.

CLARE COUNTY—Sun Oil Co.'s Becker 1, 18n-3w-2, dr 1800 ft. Farwell Oil and Gas Co.'s Siegel 1, 17n-5w-26, dr 300 ft.

MONTCALM COUNTY — L. E. Duvall's

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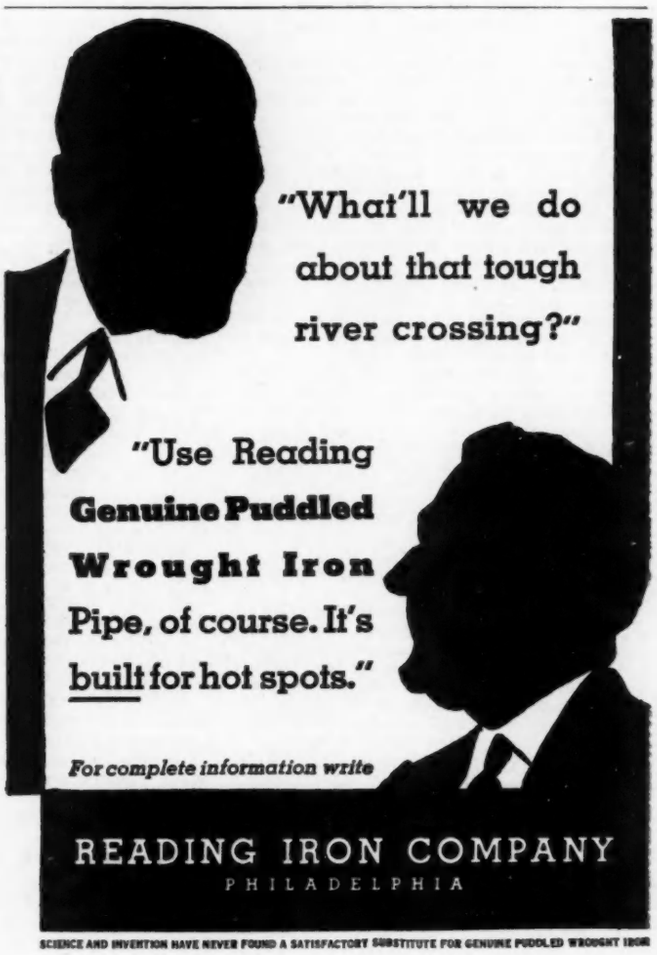
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Eiknorch 1, 11n-10w-13, sd 1343 ft. Fred Turner's McConkie 1, 10n-5w-10, dr 1650 ft. T. F. Caldwell's Ingersol 1, 10n-5w-14, dr 750 ft; Pugsley 1, 11n-5w-36, lcn. Morris & Van Kuren's Evans 1, 10n-5w-ne ne ne-22, lcn. Burnstein Oil and Gas Co.'s Keel 1, 11n-5w-35, sg 1050, dr 1230 ft. St. Louis Pipe & Supply Co.'s Osterhaut 1, 11n-5w-36, dr 300 ft; Clark 1, 10n-5w-9, rig. W. J. Bernier's Strait 1, 11n-5w-35, rig. Noah Andrew's Ries 1, 11n-5w-34, rig. Gordon Oil Co.'s Paulson 1, 12n-9w, nw nw nw-24, mim. L. G. Thompson's Knapp 1, 12n-9w-17, sd 1340 ft.

GRATIOT COUNTY—Evans and Kelly's Pencak 1, 10n-4w-18, dr 2400 ft. T. F. Caldwell's Federal Bank 1, 10n-4w-18, rig. Kircher & Moffett's Shaver 1, 10n-4w-4, sg-w, sd 1037 ft; Strange & Fortney's Bovee 1, 10n-4w-7, dr 700 ft; Bishop 1, 10n-4w-6, lcn. McClanahan Oil Co.'s Akin 1, 10n-4w-17, dr 1650 ft. Rex Oil and Gas Co.'s Biddle 1, 10n-4w-20, sp. Mammoth Petroleum Co.'s Graham 1, 11n-4w-31, dr 2350 ft. Newark Oil & Gas Co.'s Beck 1, 10n-3w-29, sg 1000 ft, dr 1100 ft.

MISCELLANEOUS

OSCEOLA COUNTY — Smith Petroleum Co.'s Moser 1, 17n-10w-20, dr 1000 ft. Russell & Johnson's Giese 1, 18n-10w-34, mim. SAGINAW COUNTY—Chapin Oil Co.'s Sutlif 1, 9n-1e-16, sd 2950 ft. ARENAC COUNTY—Tony Czaczowski's Stoski 1, 19n-4w-27, sd 800 ft. WEXFORD COUNTY — M. J. Ingold's Webb 1, 22n-9w-13, dr 1300 ft. KENT COUNTY—Lowell Dev. Co.'s Kallinger 1, 7-9w-35, dr 700 ft. HURON COUNTY—Wallace Markle's Opaka 1, 15n-11e-4, fsg 1250 ft.

KANSAS

BARBER COUNTY—Wentz's Skinner 1, cnw ne 29-31s-14w, dr 2214 ft.

BARTON COUNTY—Lario O&G Co. et al's Nuss 1, nw sw sw 11-16s-14w, fsg 2550 ft. Wolf Creek's Kraft 1, sw sw sw 26-16s-11w, td 3421 ft, abd. Suppes & Witt's Hayes 1, sw sw sw 6-16s-14w, co 375 ft. McMorrow & Spencer's Hagen 1, ne ne ne 33-20s-11w, sd 3950 ft. Pryor & Lockhart's Herrington 1, ne ne nw 6-16s-12w, ur 15-in csg 519 ft. Derby Oil Co. et al's State 1, ne se se 4-20s-11w, testing. Lario O&G & McCoy's Dolechek 1, ne nw ne 13-16s-12w, ru. Torry & Faester et al's Feist 1, ne ne se 29-18s-11w, mim.

BUTLER COUNTY—Emrich et al's Hoerman 1, sw sw sw 20-26s-3e, spd. Ward McGinnes' Jackson 1, sw sw ne 26-25s-8e, dr 1230 ft. Sanford et al's Cron 1, se se se 1-28s-4e, sd 2281 ft. Hay & Cameron's Johnson 1, nw nw se 16-26s-6e, dr 851 ft. Western Kansas Oil & Ref. Co.'s King & Marshall 1, nw nw sw 11-28s-6e, spd and sd.

COWLEY COUNTY—McCoy's Brandenburg 1, sw sw se 17-34s-5e, sd 3200 ft. Lloyd, Frost & Study's Weathered 1, sw se se 28-31s-3e, dr 2803 ft. Baden, Johnson, Roth & Farrout's David 1, ne ne sw 35-30s-4e, rig.

ELLIS COUNTY—Palmer & Storm King Oil Co.'s Ruder 1, se ne nw 17-15s-18w, rig. Stanolind O&G Co.'s Penny-Wann 1, nw sw se 12-15s-20w, ru.

ELLSWORTH COUNTY—Lario O&G Co. et al's Central National Bank 1, se se nw 33-15s-8w, dr 800 ft. Lario O&G Co. et al's State 1, sw sw sw 29-15s-8w, ur 6-in csg 3018 ft. Western Exploration Co.'s Wilkins 1, nw sw nw 9-17s-9w, sd 690 ft.

GREENWOOD COUNTY — Mullendore et al's Pedroje 1, ne ne sw 14-23s-11e, td 2136 ft, d and a.

HARVEY COUNTY—Twin Drilling Co. et al's Ruth 1, sw sw sw 16-22s-2w, dr 3020 ft. Goering Brothers et al's Brainard 1, ne ne sw 3-23s-2w, dr 1320 ft. Cameron, Derby & Trees' Brainard 1, sw se nw 17-24s-2e, sd 2500 ft. Winkler-Koch et al's Mueller 1, se sw nw 15-23s-2w, dr 65 ft. Lauck et al's Baller 1, sw sw sw 29-24s-1e, run 10-in csg 2140 ft.

KINGMAN COUNTY—Kingman Oil Co.'s Wetherall 1, ne ne sw 20-28s-10w, rig.

McPHERSON COUNTY—Palmer Oil Corp.'s Swenson 1, ne ne sw 11-18s-3w, co 3125 ft. Shell Pet. Corp.'s Wenger 1, ne ne ne 2-20s-1w, pb 3359 ft, pumped 80 bbls oil and 210 bbls water in 7 hrs. W. C. McBride's Mugler 1, se sw sw 22-20s-3w, td 3321 ft, d and a.

NESS COUNTY—Phillips Pet. Co.'s Young 1, cnw sw 13-18s-21w, dr 3850 ft.

OSAGE COUNTY—Jim Edwards Deitrick 1, cnw se 21-14s-15e, sd 800 ft.

PAWNEE COUNTY — Atlantic Oil Co.'s Slepake 1, cne ne 15-23s-17w, td 4384 ft, d and a.

RENO COUNTY — Privett Drilling Co.'s Crotts 1, ne nw ne 27-26s-10w, dr 4368 ft. Bradley's Olmstead 1, sw sw sw 22-22s-7w, abd. Mylius et al's Sprowl 1, ne nw ne 1-24s-5w, rust 3378 ft. Gypsy Oil Co.'s Tonn 1, sw nw se 16-25s-4w, dr 2522 ft. Haynes Brothers et al's Mueller 1, se se nw 30-24s-4w, br.

RICE COUNTY—Allison & Fitzwilliams et al's Stumps 1, nw nw sw 4-18s-10w, td 3267 ft, pumped 624 bbls oil, comp. Foraker-Nickerson et al's Lyon 1, se se ne 27-20s-8w, td 3617 ft, abd. Vickers Pet. Co. et al's Gouldner 1, se ne nw 16-18s-9w, dr 2930 ft. Day's Mason 1, nw ne ne 28-21s-7w, dr 2400 ft. Fred Rust et al's Brown 1, ne ne ne 16-21s-6w, ru. Anderson & Kerr et al's Lackey 1, ne se nw 13-21s-6w, mim.

ROOKS COUNTY—Trees Oil & Findeiss' Johnson 1, sw sw se 26-10s-19w, dr 717 ft. Murfin et al's Wasthusin 1, ne ne se 19-9s-16w, lcn.

RUSH COUNTY—Boyle & Grossman et al's Yost 1, csw sw 23-17s-18w, dr 1650 ft. El Dorado Ref. Co.'s Stang 1, se se nw 36-17s-17w, dr 1090 ft. Morgan & Flynn et al's Schlegel 1, se se nw 26-17s-16w, hfw 3690 ft, sd 3760 ft. Lario, Madison & Hewitt's Gillig 1, ne se nw 24-17s-17w, lcn.

RUSSELL COUNTY—Wolf Creek et al's Penn Mutual 1, sw sw sw 22-15s-15w, co 2720 ft. Reserve et al's Moore 1, cnw nw sw 15-13s-12w, ru. Ryan Pet. Co.'s Newbold 1, nw se ne 25-12s-15w, ur 6-in csg 2988 ft. Pryor & Lockhart's Spicer 1, ne ne se 21-11s-15w, ru. Hartman & Blair's Rexroot 1, ne nw nw 31-14s-14w, br. Wakefield & Amer's Hall 1, ne se sw 36-14s-15w, dr 2195 ft. Buffalo Oil Co.'s Kunz 1, ne ne sw 19-14s-15w, cellar. Vernon & Murphin's Becker 1, ne ne ne 32-15s-14w, dr 950 ft. J. Brouk & R. D. Bailey's Kluesner 1, nw nw se 34-15s-12w, spd. Murfin et al's Gorham Estate 1, ne ne se 29-14s-15w, cellar.

SCOTT COUNTY—Atlantic Oil Co.'s Mark "A" 1, cse se 28-20s-33w, dr 4300 ft.

SEDGWICK COUNTY — Western Kansas Oil & Ref. Co. et al's Betzen 1, se se ne 17-16s-13w, dr 4031 ft. Derby Oil Co. et al's Bartholomew 1, sw sw nw 8-27s-4w, dr 30 ft.

STAFFORD COUNTY—Lario O&G Co. et al's Tudormorgan 1, se se nw 23-24s-13w, td 3628 ft, pumped 439 bbls oil. Davis et al's Riley 1, se se se 19-22s-11w, dr 1360 ft. Empire Oil & Ref. Co.'s Grove 1, ne ne nw 5-22s-11w, spd. Helmerich, Payne & Newbold's Geisler 1, nw nw se 28-22s-12w, mim.

SUMNER COUNTY — Shell Pet. Corp.'s Green 1, se sw nw 3-33s-2e, hfw 3495 ft. Allison & Fitzwilliams et al's Hitchcock 1-B, se se nw 16-30s-1w, rig. D. J. Wilson's Clark 1, csl nw 15-35s-1w, dr 720 ft.

TREGO COUNTY—Jenmar Oil Co.'s Jones 1, se se se 30-12s-23w, dr 4040 ft.

WOODSON COUNTY—Foster & Schultz's Ferguson 1, cs½ ne sw 12-26s-13e, dr 1340 ft.

OKLAHOMA

ATOKA COUNTY—Clark et al's Morrison 1, se se se 32-1n-14e, sd 200 ft.

BLAINE COUNTY—Earl Ingrahm's Masters 1, sw nw nw 27-16n-11w, dr 1240 ft.

BRYAN COUNTY—C. B. Welch's Collins 1, sw sw nw 19-8s-8e, sd 570 ft. Trio Oil Co.'s Gilbert 1, se se se 25-8s-7e, sd 603 ft.

CADDO COUNTY—Denver P & R Co.'s Sah-Cam 1, cse se 33-10n-10w, dr 5910 ft. H. W. Lee et al's Horton 1, ne ne ne 9-6n-13w, rust and sd. Lee et al's Stacey Ferrell 1, sw ne ne 3-6n-13w, sd 2280 ft.

CANADIAN COUNTY—Carl Larkin's Brobine 1, nw nw ne 33-13n-5w, dr 6480 ft.

CARTER COUNTY—Carter Oil Co.'s Humble-Williams 1, sw ne sw 27-2s-3w, dr 5756 ft. Waco Turner's Munson 1, ne nw ne 35-5s-2w, dr 3685 ft.

CLEVELAND COUNTY — Sinclair Prairie Oil Co.'s Franklin Community 1, se nw se 21-10n-2w, coring 7165-7173 ft.

COAL COUNTY—Carter Oil Co. et al's John Thompson 1, csl ne nw 34-2n-9e, lcn.

COMANCHE COUNTY — F. F. Stevens' Green 1, se se sw 2-1n-13w, dr 1600 ft.

GARVIN COUNTY—George Pace's Smith 1, sw sw ne 35-1n-1e, td 2523 ft, abd. Chas. E. Carter et al's Wood 1, nw sw se 5-4n-3e, sd 2405 ft.

GRANT COUNTY — Helmerich-Payne's Crouse 1, cne sw 29-25n-8w, dr 6116 ft.

GREER COUNTY—Ent & Camp's Siminton 1, sw sw se 29-5n-21w, sd 50 ft. Gled Oil Co.'s Leeker 1, se se se 5-4n-21w, run 12½-in csg 675 ft. Fred Morgan's Carder 1, csw se 19-4n-22w, dr 2200 ft.

HUGHES COUNTY—Freeman et al's Kite 1-A, nw nw ne 8-6n-10e, sd 700 ft. Dandridge & Crane's Mead 1, nw nw ne 17-5n-9e, sd 1425 ft. Amerada Pet. Corp.'s Adams 1-A, ne ne sw 31-9n-9e, flowed 111 bbls oil 17 hrs and produced 5 million cubic ft gas, comp. The Texas Co.'s Keaton 1, nw nw sw 4-8n-10e, dr 2790 ft.

JACKSON COUNTY—Palo Duro Oil Co.'s Ealum 1, se se sw 15-2n-21w, td 1025 ft, ru to dd. Whatley & hWatley's Holt 1, nw sw se 20-1n-20w, sd 1430 ft. Buell et al's Kizzar 1, se se ne 2-2n-22w, dr 2025 ft. Gypsy Oil Co.'s Boucher 1, nw sw nw 32-1n-19w, ur 6-in csg 1951 ft. Marshall & Burnham's Hess 1, ne ne sw ne 27-1s-20w, dr 1138 ft. Associated Oil Co.'s Harrell 1-A, ne ne se 13-1s-21w, dr 250 ft. Robberson & Suppes' Walker 1, sw sw sw 19-4n-20w, dr 50 ft.

JEFFERSON COUNTY—Gypsy Oil Co.'s James 1, sw se se 30-6n-6e, dr 1540 ft. Ben Levy et al's Ryan 1, nw nw nw 16-6s-6w, mit.

KAY COUNTY—Lindsay's Waggoner 1, nw nw ne 3-27n-1e, dr 500 ft.

KIOWA COUNTY — Henson & Patton's Beeler 1, ne ne ne 11-5n-15w, td 517 ft, d and a.

LINCOLN COUNTY—Carter Oil Co. et al's McFarland C-38 1, sw sw ne 18-13n-4e, td 5290 ft, comp. Stanolind O&G Co. et al's Campbell 1, sw sw nw 3-14n-3e, td 5139 ft, 4000 ft water in hole. Carlock's Young 1, cn½ nw nw 23-15n-5e, spd and sd. Stanolind O&G Co.'s Cavanaugh 1, se se ne 31-15n-5e, td 3661 ft, rust. The Texas Co.'s Palmer 1, se sw nw 28-14n-5e, rig.

LOGAN COUNTY—Sinclair Prairie Oil Co. & Slick-Urschel's Koatsch 1, sw sw sw 23-15n-3w, average 5 bbls oil per hr, swabbing. J. C. Shaffer's Hammond 1, se se sw 10-15n-4w, coring 7066-7070 ft. Houghton Royalty's Langstone 1, sw sw se 13-17n-1w, br. Anderson-Kerr et al's Renfro 1, ne ne ne 33-16n-4w, dr 6278 ft. Mid-Continent's Community Nunn 1, se se nw 25-15n-1e, sd 3386 ft.

LOVE COUNTY—Amerada Pet. Corp. & Stanolind O&G Co.'s Westheimer & Daube 1, nw se se 27-6n-2e, sd 790 ft.

MAJOR COUNTY—I. T. I. O. Co. & Continental Oil Co.'s Fairview 1, csw se 32-23n-14w, rur.

MARSHALL COUNTY—Paul Robb's Vittetoe 1, cne se 11-5s-4e, sd 5461 ft. Schermerhorn Oil Co.'s Rich 1, sw se se 35-4s-4e, dr 327 ft.

McCLAIN COUNTY—Anderson & Kerr's Newburn 1, nw sw ne 24-5n-3e, td 2945 ft, pb 2700 ft.

McCURTAIN COUNTY—Schrivner et al's Central Life Assn. Society 1, ne sw sw 24-6s-21e, sd 970 ft.

MURRAY COUNTY—Equitable O&G Co.'s Ferguson 1, ne ne sw 26-1s-3e, dr 470 ft. Bland et al's Center 1, ne ne ne 6-4s-2e, rur.

OKFUSKEE COUNTY—Amerada Pet. Corp. et al's Jaynes 1, nw nw sw 20-10n-10e, pb 3883 ft, wocs.

OKLAHOMA COUNTY — Gypsy Oil Co.'s Schock 1, nw sw sw 2-14n-3w, dr 6260 ft. Sinclair Prairie Oil Co.'s Corbett 1, ne nw ne 17-13n-3w, dr 4740 ft. Slick-Urschel et al's Owen Community 1, se se se 19-13n-3w, dr 4909 ft.

PONTOTOC COUNTY—Paramount Oil Co.'s Graham 1, sw se sw 13-1n-7e, td 3478 ft, sd. Fleetborn Oil Corp.'s Oliver 1, ne nw se 21-4n-5e, td 2229 ft, pb 1665 ft, ru. Phillip Boyle's McCracken 1, ne nw nw 3-15n-4e, ru mach. Marcum's Magnuson 1, sw se se 23-2n-7e, td 1930 ft, dd. Continental Oil Co.'s McCarthy 1, csw nw 12-1n-7e, ru.

POTTAWATOMIE COUNTY—James et al's Nal 1, nw se sw 4-5n-3e, td 2675 ft, comp. Howard Sherman et al's Wingo 1, ne nw se 32-10n-5e, treated 1000 gals acid, produced 40 bbls, oil, comp.

PUSHMATAHA COUNTY—William Unger-

man's Messer 1, se sw sw 35-3s-18e, dr 3020 ft.

SEMINOLE COUNTY—Sovereign Drilling Co. et al's Thomas 1, nw nw se 8-6n-7e, sd 3950 ft. Cooper's Chandler 1, ne se sw 4-5n-6e, sd 1780 ft.

STEPHENS COUNTY—Wm. Angle et al's Cooper 1, ne nw nw 23-2n-7w, td 3406 ft, rur.

TILLMAN COUNTY—Laper et al's Conrad 1, ne ne ne 35-1s-19w, dr 1425 ft. Rock Island Ref. Co.'s Lynch 1, cse sw 35-1s-16w, dr 60 ft. Cockburn & Boose's Nichols 1, se se se 28-2s-19w, sd 1580 ft.

EAST TEXAS

ANDERSON COUNTY—Gulf's W. B. Robinson 2 (100-ac), David Stilts sur, Camp Hill area, elev 630 ft, Pecan chalk 3982-4245 ft, Austin chalk 5007-5237½ ft, cored sand 5240-5246 ft, no show o and g, sd for dst; J. M. Delaney 1 (174.2-ac), Phillip Martin sur, Camp Hill area, elev 573 ft, dr 555 ft. Southern Pine Lumber Co. 1-A (105-ac), H. Main sur, Camp Hill area, dr 1500 ft. Hunt-Sun Co.'s Mrs. Alice Scott-Pure 1 (300-ac), Jas. Crawford sur, Slocum area, elev 411 ft, Pecan chalk 4450-4648 ft, Austin chalk 5055-5217 ft, top Woodbine series 5264 ft, top sand 5266 ft, tested sw, dry and abd 5483 ft. C. L. Mahaney et al's Elkhart State Bank 1 (30-ac), P. Martin sur, Camp Hill area, lcn. R. B. Sanders et al's S. G. Moore 1 (28.83-ac), J. C. Rosson sur, Camp Hill area, lcn. Tide Water and Texas Seaboard's N. N. Wills 21-A, Cayuga field Trinity test, elev 308 ft, dr 8150 ft; C. T. Valentine 1 (301-ac), John Little sur, 9 mi n of Palestine, elev 454 ft, fsh 3224 ft; John Smith 1 (49.1-ac), John Adams sur, Long Lake field gas unit, elev 294 ft, Pecan chalk 3458-3709 ft, Austin chalk 4711-4946 ft, top Sub-Clarksville sand 4957 ft, top Woodbine 5165 ft, top water sand 5453 to 5465 ft, pb to 5279 ft, est 75,000,000 ft gas; D. Cern & J. H. Shaw 1 (1216-ac), Daniel Parker sur, Long Lake field, rog.

BOWIE COUNTY—Tex-Ark Oil Co.'s J. B. Hamilton 1 (40-ac), Jessie Milam sur, elev 272 ft, dr 560 ft.

CAMP COUNTY—E. J. Moran, G. E. & Ray Hubbard's W. M. Mitcham 1 (100-ac), L. Rose sur, 1½ mi n of Newsome, lcn.

CASS COUNTY—J. M. Lapin and Penguin O&G Co.'s A. M. Rhyne 1 (570-ac), David Frazier sur, 3 mi w of Avinger, elev 357 ft, Pecan chalk 2451-2965 ft, top Blossom sand 3390 ft, top Woodbine sand 3828 ft, top Georgetown lime 3888 ft, dry and abn in lime and shale 3902 ft.

CHEROKEE COUNTY—Florence Oil Co. & H. A. Baker's Tol Smith 1 (40-ac), Jose Pineda sur, 4 mi nw of Jacksonville, rig. Jacksonville O&G Corp.'s H. D. Henderson 1 (40-ac), J. Pineda sur, elev 409 ft, sd 693 ft. Killough et al's J. S. Strickland 1 (40-ac), Urian Moore sur, 7 mi nw Jacksonville, elev 433 ft, sd 3505 ft. Ponta Oil Co. et al's C. W. Darley 1 (35-ac), Cyrus Parks sur, 2¼ mi s of Summerfield, elev 434 ft, Pecan chalk 3584-3995 ft, top Austin chalk 4416 ft, dry and abd in chalk 4550 ft. Cal T. Scott-Turpin & Stidham & Thrasher's Whiteman-Decker 1 (30-ac), J. H. Armstrong sur, Rusk pool, rig. T. J. Wood & Young's New Birmingham 3-A (160-ac), Levi Jordan sur, Rusk pool, elev 478 ft, Pecan chalk 4027-4444 ft, show oil 4450 ft, top Austin chalk 4940 ft, coring chalky shale 5171 ft.

FREESTONE COUNTY—J. E. Milburn & J. B. Patty's S. E. McAshan 1 (40-ac), G. Diaz sur, 3½ mi se Donie (was abd at 90 ft), co 270 ft.

ELLIS COUNTY—Ed. Murphree & Lon Coker's Coke 1 (30-ac), R. de la Pena sur, Austin chalk 622-1010 ft, sd 1545 ft.

GREGG COUNTY—O. T. Clark et al's T. G. Williams 1 (100-ac), David Hill sur, 3 mi ne Longview, elev 426 ft, Pecan chalk 2391-2985 ft, top Austin chalk 3447 ft, sd 3771 ft.

HENDERSON COUNTY—Edson Pet. Co.'s C. L. Loper 1 (3-ac), Isaac Clendennen sur, Cayuga area, lcn. O. M. Rector et al's C. L. Loper 1 (3½-ac), I. Clendennen sur, Cayuga area, lcn. Fred Upchurch et al's C. L. Loper 1 (3½-ac), I. Clendennen sur, lcn. H. M. Wilson et al's Fee 1 (943-ac), Thomas Caro sur, 5 mi n Malakoff, dk. Toddie L. Wynne et al's C. L. Loper 1 (11-ac), I. Clendennen sur, lcn.

HOPKINS COUNTY—D. A. Hale et al's L. N. Hall 1 (70-ac), A. Caro sur A-143, elev 506 ft, Pecan chalk 1825-2040 ft, top Austin chalk 2728 ft, sd 2950 ft.

HUNT COUNTY—D. T. Cauble et al's Y. B. Reed 1 (220-ac), F. Thweatt & C. B. Payne sur, 3 mi se Greenville, top Woodbine 2809 ft, top Red Beds 2874 ft, sd 3435 ft. J. F. Morrissey Co., Inc.'s P. B. Fry 1 (146-ac), Calloway Davis sur, 7 mi se Ladonia, dr 410 ft.

KAUFMAN COUNTY—G. H. Germany et al's D. Clark-W. S. Kirby 1, S. Edens sur, sd 1780 ft. L. P. Kean et al's J. B. Hunter 1, R. Sowell sur, 4 mi s Terrell, elev 453 ft, top Austin chalk 1785 ft, sd 3400 ft.

LEON COUNTY—Killough & Tucker's J. W. Lee 1 (10-ac), Jacob Burleson sur, Buffalo area, dr 2075 ft. Harry Williams et al's B. H. Henry 1 (70-ac), R. Rogers sur, lcn.

LIMESTONE COUNTY—Dan H. Daugherty et al's Sallie Welch 1 (94-ac), Pedro Varella sur, Austin chalk 2350-2650 ft, top Woodbine 2890 ft. to set cas 2895 ft, td 3004 ft. J. W. Kemp Co.'s Vol Long 1 (40-ac), Pedro Varella sur, 2½ mi n Thelma, top Woodbine section 2764 ft, show o and g on dst, td 2860 ft, sd for cas. J. Edward Mills et al's J. B. Hunt 1 (34¼-ac), Israel Woods sur, 3 mi ne Kosse, Pecan chalk 2010-2137 ft, Austin chalk 2780-3158 ft, top Woodbine sand 3578 ft, testing, td 3636 ft. W. A. Reiter, Yandell Rogers & W. H. Foster's J. Minor Tidwell 1 (230-ac), 2½ mi sw of Mexia field, rig.

MORRIS COUNTY—Steve J. Rotondi et al's W. & C. Smith 1 (50-ac), M. C. Vela sur, 2½ mi sw Naples, sd 66 ft.

NAVARRO COUNTY—L. N. McCulloch et al's Berry Bros. 1 (35-ac), W. W. Moss sur, Austin chalk 751-1060 ft, sd 1182 ft. E. M. Thomason & Co., Inc.'s Celia Moran 1 (100-ac), Wm. Haggard sur, rig. Wiggins & Albritton's D. A. Donoho 1 (63½-ac), John Caudle & Highnote sur, 2 mi sw Corsicana, elev 467 ft, sd 1439 ft.

RED RIVER COUNTY—J. E. Dinger Oil Co.'s W. T. Norris 1 (351-ac), Joseph Guest sur, 1 mi s Detroit, elev 464 ft, Red Beds 1290-1413 ft, dry and abd 1861 ft. A. M. Gibbons et al's B. A. Rust 1 (1915-ac), C. C. Welborn sur, s edge Avery, rog.

ROBERTSON COUNTY—H. L. Patton Co.'s W. H. & H. A. Ely 1 (616-ac), Antonio Manchaco sur, 5 mi se Hearne, elev 392 ft, top Carrizo 661 ft, sd 2336 ft.

RUSK COUNTY—Ben E. Lamb et al's Haywood Leath 1 (185-ac), L. J. Dooley sur, 2½ mi ne Pirtle sur, elev 370 ft, Pecan chalk 2418-2793 ft, Austin chalk 3352-3512 ft, sd 4750 ft. Stewart & Egan's Hall Wood 1 (847-ac), blk 12, Jose I. Sanchez sur, top Pecan chalk 2712 ft, dr 2825 ft.

SMITH COUNTY—W. L. Cloud & A. G. Deck's Dora Kendall 1, John Williams sur, 3 mi e of Van field, sd 1650 ft.

TITUS COUNTY—Steve J. Rotondi et al's O. C. Lilliansterm 1 (40-ac), W. H. Crawford sur, 5 mi se Talco, elev 301 ft, dk.

UPSHUR COUNTY—Thos. D. Humphrey et al's Claude Nation 1 (156.28-ac), Robertson Asher sur, 1½ mi n of Ore City, elev 332 ft, Pecan chalk 2415-2920 ft, Austin chalk 3640-78 ft, top Woodbine sand 3712 ft, tested sw, dry and abd at 3801 ft; J. Ferguson 1, R. Wyatt sur, 2½ mi s Ore City, rig.

VAN ZANDT COUNTY—Blackwell O&G Co. & Ike Rudman's J. F. Malone 1 (100-ac), J. Balch sur A-102, 2½ mi se Van, Pecan chalk 2207-2417 ft, Austin chalk 3160-3404 ft, top Woodbine series 3640 ft, top sand 3660 ft, tested sw, dry and abd 3801 ft. A. A. Geyer et al's J. E. Crim 1 (41.6-ac), Wm. Daniel sur, lcn. Tanner & West's J. D. Smith 1 (145-ac), Marshall University sur, 3 mi se Van, lcn. Newt Tidwell & W. J. Rogers' L. E. Breucher 1 (98¾-ac), David Clapp sur, 5 mi se Wills Point, elev 499 ft, top Pecan chalk 1845 ft, top Austin chalk 2924 ft, fsh 3233 ft.

WOOD COUNTY—Dean Bros. and Adkisson's W. H. Finklea 1 (175-ac), Benjamin Anderson sur, rog.

EAST TEXAS BORDER COUNTIES

HARRISON COUNTY—Roy C. Swails et al's Bonnie Pitts 1, sec G. W. Martin sur, sd 170 ft high water. Hanover, Begrendall et al's Buchanan 1, W. M. McIlvain sur, sd 3682 ft. Hammonds & Williams' W. T. Cock 1, J. N. Sorrell sur, arr deepen, td 2392 ft.

MARION COUNTY—Ed S. Holman's Lizzie Henderson A-1, R. Bennington sur, pb to 2445 ft, used acid, dry sd.

PANOLA COUNTY—J. L. Cadrin's Robt. Johnson 1, J. Johnson sur, dk. Flinchbaugh & McAneny's M. G. McCormick 1, Jas. P. McAdams sur, rur. G. F. Hudson's J. F. Nail 1, C. McCrary sur, elev 283 ft, claim so 2337 ft, set 4½ in csg 2300 ft, td 2337 ft. Geo. Le Grand's P. J. Laidleigh 1, A. Thompson sur, sd 55 ft. S. B. Wallace 1, A. M. McLaughlin sur, ru and sd.

SABINE COUNTY—Smithsonian Pet. Co.'s Hamilton 1, Jno. Haley sur, dry in Wilcox sand 858-68 ft, arr deepen, td 868 ft.

SHELBY COUNTY—I. M. Bradley et al's J. J. Ashberry 2, J. M. Mitchell sur, 6⅝ in csg 2960 ft, sd 3390 ft. C. E. Litchfield et al's W. C. Windham 1, A. H. English sur, rur.

SOUTH TEXAS

BANDERA COUNTY — Palm Winn Oil Co.'s R. B. Watson 1, sec 71, td 1700 ft, pull 6⅝ in csg, str, will re-set pipe. Plateau Oil Co.'s R. G. Garrison 1, sec 506, GC&SF sur, sd 3404 ft for rep.

BASTROP COUNTY—Batts & Jarmon's A. Paris 1, J. Maximillian sur, sp. Malone & Owens' S. S. Spooner 1, L. Leverenz sur, sd 1565 ft. Marts & Beavans' W. L. Miller 1, blk 22, Dennis Dykes sur, dr 3182 ft. Joe Miller et al's H. Litton 2, A. Navarro sur, mim. Nelson Puett's Carroll 4, A. Mayes sur, treating with acid 2228 ft; Carroll 5, 510 ft ne 4, A. Mayes sur, prep to sp.

BEE COUNTY — Mills Bennett's L. W. Dirks 1, 150 ft nl, 400 ft el of 37.5-ac lease out of 335-ac tr, H. L. Williams sur 1½ mi sw Dirks pool, dr 2500 ft. G. M. Church's J. C. Woods 1, J. Ryan sur, mim, last rept. Dirks Bros. & Earl Callaway's I. J. Miller 1, C. Rivas sur, lcn. Judge Dougherty & Dirks Bros. et al's Hicks 1, sec 45, Hicks & Hall sub, J. M. Urañga gr, dr 2780 ft. Falvey et al's S. D. Copeland 1, B. Q. Hadley sur, dr 250 ft. Felmont Corp.'s J. T. Earnest 1, Bee County School Land sur No. 17, dr 5963 ft. A. Hartzendorf's Fee 1, G. A. Kerr sur, pumping about 30 bbls per day 3648 ft. Humble O&R Co.'s Thompson 2, Garrett Roache sur, dr 5805 ft, heaving shale. F. P. Hynes et al's Theo. M. Plummer 1, sec 33, Plummer sub, Chessman sur, sd 1530 ft. Sun Oil Co.'s J. T. Borroum 1, Baker sur, lcn.

BEXAR COUNTY — American Gas Co.'s Oliver 5, M. F. Rodriguez sur, re-dr 2715 ft. James B. Cunningham et al's L. F. Ridder 1, County blk 5196, dr 395 ft. M. A. Frederich's Fee 1, F. Recardo sur, fsh 1050 ft. C. J. LeComte's Albert Herbst 1, M. Leal sur, mim. McPhee & Briggs's Florence Lamb 1, M. de Luna sur No. 4, dr 2150 ft. Mid-Tex Pet. Co.'s Walker 1, S. N. Dobie sur, dk. Joseph H. Parker's M. McCloskey 1, F. A. Desaque sur, dr below 150 ft. Carroll C. Raborn's L. U. Palfrey 1, 2000 ft w of Salado Creek and 2500 ft from sl of tr in Alamiz league, 5 mi se S. A., lcn; A. B. Stephens 1, P. N. Hays sur, sd 410 ft; Claud McCauley 1, Wm. Harris sur No. 52, dr 310 ft. Richcul Oil Co.'s McCullough 1, J. M. Baerrera sur, sd 450 ft. Rowan & Nichols Oil Co.'s A. Zigmond 1, A. Deffenbaugh sur, dr 1165 ft.

BLANCO COUNTY—R. T. Rowe & W. E. Nixon's Polk Morrisey 1, T. H. Webb sur No. 91, dr 40 ft.

CALDWELL COUNTY—Exploration Dev. Co.'s W. T. Mooney 1, Solomon Seal sur, fsh 1675 ft. Ogden & Reed Oil Co.'s T. H. Compton 1, P. Martinez sur, dr 1533 ft. Trail et al's A. B. Tiller 1, G. Hinds sur, td 2612 ft, sd. R. Y. Walker's Walker Bros. 2, S. Seal sur, completing 2095 ft.

CALHOUN COUNTY — Continental Oil Co.'s American National Realty Co. (Moody) 2, ne ne sec 6, blk C, P. Garcia sur, sd 6522 ft, in heaving shale, for ds. Halliburton Oil Producing Co.'s D. Burton 1, M. Sanchez sur, td 6262 ft, setting 7 in csg to 6235 ft. Adrian Moore's McAster 1, M. Sanchez sur, set sur csg, re-dr. Texas Co.'s Blardone 1, S. Shupe sur, dr 6865 ft, sand and shale, no shows; C. Geryk 1, 1400 ft nel, 470 ft sel of 134-ac tr, Benavides sur, dr 1560 ft; R. Duelberg 1, M. Sanchez sur, td about 6450 ft, pb 6070 ft, sdtr, dr out 6112 ft, ds stuck, now fsh; Martin 1, F. Garcia League, sd 6430 ft for repairs; W. A. Shofner 1, M. Sanchez sur, set 10 in csg 1311 ft, re-dr. Additional lcns

made in Port Lavaca area, but will not be reported until active.

DUVAL COUNTY—Mills Bennett's Duval County Ranch 2, sec 258, dr 2856 ft, gas sand 1568-81 ft. Bridwell Oil Co.'s Sutherland 2, sec 122, td 2780 ft, show little sw, pb. Al Buchanan & Blanco Oil Co.'s G. Ruiz Est. 4, sec 73, dr 3110 ft. Byrd Oil Corp.'s Wright et al 7, 330 ft sl and el sec 101, lcn. Duval Oil Corp.'s Bishop Cattle Co. 1-A, sec 70, dr 450 ft. Frank Gravis' J. W. Byland 1, blk 4, sec 78, dr 2500 ft. Harvey & Henderson's R. Serna Jr. 2, ne nw sec 384, sp. Humble's Bank of Fredericksburg (T. D. Smith) 1, sec 382, dk, comp water well. Intrepid Oil Co.'s Parr 2, sec 115, coring 4700 ft. D. H. O'Byrne's Ball 1, Agua Poqu'ta gr, sec 3, sp. Santa Clara Oil Co.'s Wood-Welder 1, sec 385, dr 2150 ft. Stieren Oil Co.'s Wright 1, sec 72, sp. Tex-La. Oil Corp.'s Hubbard 1, sec 84, ru to pump. E. R. Thomas' C. W. Hahl 1, sec 63, 330 ft sl and el se¼ sec, mim.

FRIO COUNTY—Amerada's Halff & Oppenheimer 4, A. H. Gibson sur, sec 15, sand 3922-34, completing; W. H. Smith 1, J. B. Mason sur, dr 3914 ft. Shoemaker et al's M. Roach Est. 1, C. Wentzel sur, No. 139, sd 3748 ft for rep.

GOLIAD COUNTY — Keystone Royalties Co.'s C. B. Wood 1, 10,500 ft sw and 3230 ft se of n cor of John Sherman sur, 3 mi e Berclair, dr 2100 ft.

GUADALUPE COUNTY — Gode et al's Hicks 1, E. de Los Santos Coy sur, ru. A. D. Locke's Mrs. N. S. Lowman 1, C. Campbell league, dr 1275 ft in sdtr hole, td 1810 ft. Mineral Corp. of Texas' Allen Phillips 1, Cortines sur, dr 600 ft. W. A. Scrutchin's A. H. Smith 1, J. B. Cowan sur, sp. Suttle et al's Baensinger 1, A. O. Manchola sur, td 2155 ft, csg set 1783 ft, prep to dr plugs.

HIDALGO COUNTY — Bluff Pet. Co.'s Knowles 1, sh 14, por 49, sp and sd for repairs. D. M. C. Oil Co.'s Daskam 1, blk 34, por 45, td 4114 ft, set 5 in csg 4100 ft, wocs. Nedler & Graham's Osca Daskam 1, blk 42, por 45, ru. E. L. Smith Oil Co.'s A. Flores 1, tr 250, por 38, coring 3058 ft. Union Sulphur Co.'s ARGL&I Co. 1, tr 2297, lot 59, N. Capisallo Dist., Llano Grande gr, td 6431 ft, ru to dd; ARGL&I 2, tr 2082, blk 86, N. Capisallo Dist., Llano Grande gr, td 8044 ft, sdtr 4000 ft, now dr 4365 ft.

JACKSON COUNTY — Shell Pet. Corp.'s McCrory 1, sec 15, Morris & Cummings sur, dr 7295 ft.

JIM HOGG COUNTY—Darby Pet. Corp.'s Holbein 1, blk 5, Los Animas gr, ru. French Oil Corp.'s East 2, blk 74, sh 2, Moritas gr, dr 1110 ft. Miller et al's Yeager 1, blk 6, sec 20, sd 3378 ft. Phillips et al's Allen 1, blk 293, Pippin sub, Randado gr, lcn.

JIM WELLS COUNTY—A. M. Hagan et al's Robt. Adams 1, sec 10, mir. Magnolia Pet. Co.'s A. A. Seeligson 6, V. Canale sur No. 218, dr 5280 ft. Maher & Shira's Schaeffer 1, S. Bigham sur, dr 3765 ft.

KARNES COUNTY—Jim Kendricks et al's W. H. Radford 1, Morse Nichols sur, sp. Luling O&G Co.'s W. W. Boyce 1, S. D. Still sur, sd 3721 ft for repairs. H. A. Pagenkopf's McAda 1, Carlos Martinez sur, sd 5256 ft for boiler repairs. Harry Sample's F. Seeger 1, 330 ft nel and wl of 82.6-ac tr in J. Poitevent sur, ru.

KERR COUNTY—Jeff Love & Eastland Oil Co.'s Jeff Love 5-E, sec 1594, J. Martinez sur, td 5625 ft, hole full of sw.

LA SALLE COUNTY — C. W. Beck's Rancho Feliz 1, sec 47, dr 3100 ft.

LEE COUNTY—James E. Pederson's C. A. Turner 1, D. Hudson sur, td 6560 ft, testing upper sands.

LIVE OAK COUNTY—Baugh & McMillan's Walton and Campbell 1, D. R. Faut sur, dr 3675 ft. Henderson Coquat's Reagan 1, McGloin sur, dr 1000 ft; H. E. Rex 1, GH&H sur No. 1, coring 4404 ft. Darby Pet. Co.'s McNeill 1, GH&H Ry sur, dr below 500 ft. Feltner, Lefevre & Spice's Carter Investment Co. 1, sec 299, Hooper & Wade sur, ru. Houston Oil Co.'s Cartwright 32, M. Trudo sur, dr below 5400 ft. Marine Oil Co.'s E. S. Adair 1, J. McGloin sur, dr 3765 ft. Smith & Storey's Nueces Valley Townsite 1, Jane Curry sur, completing, sand 5206-16 ft. J. O. Whittington et al's Little 1, Shipp sur, td 5758 ft, testing upper sands.

McMULLEN COUNTY—Brown & Nessley's Worley 1, M. O'Boyle sur, sd 660 ft, for repairs. Henderson Coquat's Ezzell 1, D. R. Fant sur, sand 760-68 ft, set 6⅝ in csg, wocs. John O. Gibson's G. C. West 1, lot 1, blk 4, sec 14, H&TB Ry. sur, sd 450 ft acct high water; Masur & McDowell 1, 330 ft nl and wl of sec 19, HT&B RR sur, ru. H. J. Bussa's F. B. Horton 1, nw¼ s 640-ac James M. Jean sur No. 29, making lcn. Howard & Carpenter's Jungman 1, M. Hely sur, dr 722 ft, last rept. Loma Oil Co.'s L. Jacob 2-W, Benham sur No. 9, dr 700 ft. Points et al's Fahler 1, Pittuck sur, re-dr 650 ft. C. C. Shumway et al's Shiner Ranch 8, sec 53, Shumway sub, sp and set sur csg. Texio Oil Co.'s Atkinson 1, sec 13, M. J. Dean sur, dr 2110 ft.

KENDALL COUNTY — J. E. Freeman's Gerfers 1, 1200 ft sl and el of tr in Mark Hodgeson sur, sec 796, prep to mim.

KIMBLE COUNTY — Wilcox O&G Co.'s Peterson 1, mist.

MEDINA COUNTY—Joe Deupree et al's Hugo Batot 1, John Ball sur No. 1478, dr 341 ft.

NUECES COUNTY — Southern Minerals Corp.'s Rand Morgan 1, lot 29, Eliott sur, coring 4480 ft.

REAL COUNTY—H. J. Heartwell's L. J. Haby 2, AB&M sur, No. 175, dr 3200 ft.

REFUGIO COUNTY—Temple Hargrove et al's Weiss 1, nw sec 40, Bonnie View sub, dr 5200 ft. Humble's M. M. Marberry 1, J. Dunn sur, dr 5574 ft. Magnolia Pet. Co.'s Mattie Woods 1, S. Turner sur, dr 7640 ft, heaving shale.

SAN PATRICIO COUNTY—Conroe Drlg. Co.'s E. H. Welder 1-D, Portillo sur, dr 1800 ft. Continental Oil Co. & Atkins & O'Neil's J. F. Welder 3, Juan Hart gr, sp and set sur csg. Heep Oil Corp.'s E. H. Welder 1-E, sec 46, Welder sub, reported setting casing about 5400 ft. Plymouth Oil Co.'s Welder 2-C, Morrow sur, dr 4150 ft; 3-C Morrow sur, dr 3865 ft; Welder 1-D, Portillo sur, dr 1900 ft.

STARR COUNTY—Porter Evans' Kelsey Bass 1, 330 ft sl and el of lot 8, blk 1, B&B sub, por 86, lcn. Armstrong, Emanuels & Adams' SCCC 1, blk 57, JL sub, por 89, perf 2711-15 ft, flow o, g, sw, may abnd. Clopton et al's D. L. Tijerina 1, blk 14, sh 14-C, por 80, dr 2900 ft; Kelsey Bass 1, blk 5, sec 10, por 86, dk, developing water supply. Conroe Drlg. Co.'s Guerra 10A, blk 35, J. N. Crawford sub, por 56, dr 3404 ft. Henshaw Bros.' S. Sanchez & Bro. 1, sw se sec 344, 1320 ft e Sunray's Sanchez 1, dk, mir. Hughston Oil Co.'s Wood-Gregg 1, por 84, fsh 920 ft. Hiriam Reed's Block Bros. 1, blk 4, tr 28-A, por 80, td 1500 ft, no rept. Sun & Humble's Manto & Briggs 1, nw nw sec 53, sd 2250 ft for water.

VICTORIA COUNTY—Costa Oil Co.'s J. E. Schovajsa 1, lot 14, Rupley sur, sand 4775-85 ft, set 7 in csg 4773 ft, dr out plugs; Henderson & Pickering 1, 330 ft nwl and swl blk 19, Benevides sur, ru. Gillespie & Superior's Brandt 1, lot 11, Rupley sur, set 1000 ft sur csg, wocs; Henderson & Pickering 2, lot 6, Nancy Dean sur, dr 6200 ft. Eastern States Oil Co.'s E. Williams 1, 330 ft sel and swl of 100-ac tr in E. Benevides sur, ru. Houston Oil Co.'s Fagan 1, M. Rodriguez sur, re-dr 1027 ft. Magnolia's Henderson & Pickering 1, lot 18, E. Benevides sur, sp. Texas Co.'s A. M. McFaddin 9, J. M. Rine sur, dr below 5250 ft. Trans-State Oil Co.'s Robt. Kanster 1, R. Manchola gr, outpost well, Coleto Creek, ru.

WEBB COUNTY—Carolina-Texas Oil Co.'s Barnhart 1, sec 262, de la Garza sur, sd 2405 ft, mir. Payne et al's Hoggterp 1, blk 6, sec 1110, sd 1935 ft. Arthur H. Wray's Geo. Stuempke 1, sh 1, Brewster Pasture, Joaquin Galan gr, dr 1129 ft.

WILLACY COUNTY—Kingwoods Oil Co.'s Stillman Ranch 1, lot 16, blk 30, sh 44, Stillman ranch sur, dr 1950 ft. South Texas Dev. Co.'s Armendiez 1-A, Little Share 4, td 4000 ft, to move in electric rig to dd.

WILLIAMSON COUNTY—A. T. Parr et al's Dan Murphy 1, W. J. Cowan sur, dr below 350 ft. W. L. Stephens et al's J. P. Carlson 1, S. C. Jones sur, sd 200 ft for engine rep. Stone & Gabehart's P. S. Wernli 1, P. Cartwright sur, dr 310 ft.

ZAPATA COUNTY—Cox et al's Yzaguire 1, sh 17, por 15, fsh 1350 ft. Danvers & Harrison's N. J. Vela 1, blk 7, Vela sub, por 29, sd 2360 ft. O. W. Killam's A. M. Bruni 10, blk 60, Blas Uribe sub, Borrego gr, dr 1100 ft. E. L. Smith Oil Co.'s R. Hinnant 1, blk 27, sec 307, dr 150 ft.

TEXAS GULF COAST

ANGELINA COUNTY—Hunter Co.'s Long Bell 1, six mi se of Huntington, J. Durst sur, preparing to core deper at 1930 ft. Lee Tex Oil Co.'s H. A. Geisler 1, 1 mi nw of Lay, S. J. Thompson sur, sd 1830 ft.

AUSTIN COUNTY—Deering & Kayser's T. A. McClenton 1, se of Bellville, Thos. Bell sur, dr shale 1480 ft.

BRAZORIA COUNTY—Texas Co.'s Freeport Sulphur Co. 1, 2500 ft e of Canal, Areola sur, heaving shale 4186 ft.

CHAMBERS COUNTY — South Gulf Oil Corp.'s R. M. White 1, L. Bryan sur, dr sand 6533 ft.

COLORADO COUNTY—Gulf's A. R. Milentz 1, 1¼ mi se of Rock Island, I. & G. N. sur, sec 33, abd 5550 ft.

HARDIN COUNTY—Jack Frazier's Sternenburg 1, nw of Kountz, J. Person sur, abd 6897 ft.

HARRIS COUNTY — Johnson & Johnson and Stanolind's Fee Land 1, S Houston, H&TB sur, trying to straighten hole at 5069 ft. West Prod. Co.'s O. P. Woodburn 1, Genoa, A. Whitlock sur, dr shale 6510 ft.

LIBERTY COUNTY—Liberty Independent Oil Co.'s J. M. Neal 1, S. Strong sur, sd 4060 ft. Jack Frazier's Lynott Buffon 1, J. Robeson sur, spudded. A. L. Maxwell's M. P. Hincliff 1, ne of Cleveland, H&TC sur No. 105, dr shale 5250 ft.

MATAGORDA COUNTY — Continental's Feife 1, Citrus Grove, J. S. Chriswell sur, woc 1250 ft. H. M. Smith's Wadsworth 1, S. R. Fisher sur, dr shale 8195 ft.

MONTGOMERY COUNTY—Gholson et al's A. Parker 1, nw of Willis, J. Lindley sur, sd waiting on orders at 3769 ft.

ORANGE COUNTY — T. S. Ruff's Kaulback 1, 4 mi e of Beaumont, J. Armstrong sur, abd 2110 ft.

SAN JACINTO COUNTY—Shell's Moore 1, J. D. Martinez No. 3 sur, ru.

WALKER COUNTY — S. E. Grey's C. Weinzell 1, se of Riverside, J. J. Porter sur, sd 4330 ft.

WASHINGTON COUNTY—Powers Prod. Co.'s Boenker 1, w of Washington, J. Newman sur, dr shale 590 ft.

WHARTON COUNTY—Texas Co.'s Pierce Estate 2-A, I&GN sur, sec 39, dr shale 3750 ft.

LOUISIANA GULF COAST

ACADIA PARISH—Continental's T. Ortigo 1, 6 mi nw of Iota, sec 28-7s-2w, dr shale 1385 ft. Humble's Rice Milling Co. 1, s of Crowley, sec 27-10s-2e, dr shale 8168 ft.

BEAUREGARD PARISH — C. K. Drlg. Co.'s Long Bell Lbr. Co. 1, w of Ludington, sec 26-2s-8w, sd 2882 ft.

CALCASIEU PARISH — Fred Oil Co.'s Faist 2, 900 ft se of No. 1, sec 26-8s-10w, dr shale 3004 ft. Wheeler Oil Co.'s School Land 1, s of Iowa, sec 16-9s-7w, wocs 3000 ft.

CAMERON PARISH — Magnolia's Broussard 1, sec 13-12s-9w, dr water sand 7244 ft.

EAST BATON ROUGE PARISH—Superior's Duplantier Community 1, University Block, sec 65-7s-1w, dr shale 7416 ft.

EVANGELINE PARISH—Basile Oil Co.'s Haas 1, 6 mi se of Hampton, sec 14-6s-2w, dr water sand 3166 ft.

IBERIA PARISH—Texas Co.'s State Lake Fausse Point 1, on s flank of dome, sec 35-11s-8e, dr shale 4856 ft.

JEFFERSON PARISH—Texas Co.'s Bayou St. Denis 1, 6 mi se of Lafitte, sec 19-17s-24e, comp 1110 bbls per day 9572 ft.

ST. BERNARD PARISH — Emerald Pet. Co.'s Shell Beach Properties 1, s edge of Bayou Louis, sec 31-13s-15e, dr shale 1205 ft.

ST. LANDRY PARISH — Woodley Pet. Co.'s Thislewaite Lbr. Co. 1, Washingotn prospect, sec 68-5s-4e, dr shale 5822 ft.

ST. MARTIN PARISH—Texas Co.'s State Blum Bob 1, Henderson, sec 9-8s-7e, dr shale 7986 ft. Same operator's St. Martin Land Co. 7, Henderson, sec 9-8s-7e, driving piling.

NORTH LOUISIANA

BOSSIER PARISH—W. A. Kirklin, Tr.'s Garrett & McKellar 1, se nw nw 3-21n-13w, dr 2005 ft. Plain Dealing Synd.'s L. A. King 1, nw ne ne 36-23n-13w, dr 1975 ft. Richplain Oil Co.'s Gaines 1, nw nw 22-22n-13w, wocs 10-in csg 42 ft.

CADDO PARISH—Ed Bailey et al's Hartzo

1, ne nw 28-22n-15w, sd 1230 ft. F. D. Hyde et al's Thigpen-Herold 1, nw nw se 5-15n-15w, dk. A. D. King, Tr.'s Roach 1, 4-14n-16w, dry 2208 ft, tested 7 thribbles mud and sg 2636-78 ft, arr deepen. Simplex Oil Co.'s Keith 1, sw se 18-20n-14w, dr 2710 ft. A. F. Tarver's George 1, sw ne ne 23-19n-15w, 6-in csg 2445 ft, tested sw and sg 2462 ft, sd 2462 ft. United Gas Pub. Serv. Co.'s D. F. Barr 1, frac sec. 29-23n-16w, rur.

CALDWELL PARISH—Critchett & Wood's La. Cent. Lbr. Co. 1, se nw ne 18-11n-3e, 10-in csg 133 ft, dr 1075 ft. G. W. Zeigen et al's La. Cent. Lbr. Co. 1, nw sw sw 25-13n-3e, dr 150 ft.

CATAHOULA PARISH—Phillipi et al's La. Cent. Lbr. Co. A-1, 2-9n-6e, 6-in csg 820 ft, tested est 2½ mil ft gas, si, td 948 ft.

CLAIBORNE PARISH—J. C. King et al's Odis Webb 1, nw ne 21-21n-8w, dr 2003 ft, lime. E. T. Oakes et al's Patton Est. 1, ne ne 1-20n-5w, spd.

DE SOTO PARISH — E. B. Bird et al's A. D. Johns Jr. 1, se nw 20-14n-16w, elev 290 ft, 6-in csg 2583 ft, dry at 2613 ft, wash with oil, td 2613 ft. Century Oil & Drlg. Corp.'s J. M. Norton 1, sw ne 27-11n-14w, tested sw, sd 2825 ft. Flesh & Hootkins' J. S. Farmer 1, nw se ne 14-12n-14w, dr 2790 ft. P. G. Frailey et al's J. E. Stell 1, 5-12n-16w, ru and sd. C. T. Ruffin's Elmo P. Lee 1, nw sw 33-14n-13w, rur. Ed Saffold et al's T. D. Thigpen 1, nw sw ne 33-13n-13w, wocs 6⅝ in csg 1620 ft. Ben F. Smith et al's J. W. Porter 1, sw nw 23-12n-13w, spd 10-in csg 75 ft, dr 335 ft. E. L. Foster et al's Youngblood 1, 9-11n-14w, claim sg 2691 ft.

EAST CARROLL PARISH—Century Oil & Drlg. Corp.'s Olivedell Pltg. Co. 1, 56-21n-12e, 10-in csg 285 ft. O. G. Collins et al's H. L. Hunt 1, cent 26-22n-13e, dr 1440 ft.

MADISON PARISH — Southern Land & Expl. Co.'s Deltic Inv. Co. 1, nw nw 1-17n-12e, rur.

MOREHOUSE PARISH—C. I. Bacon et al's Crossett Lbr. Co. 2, se sw 36-23n-6e, rur. Alex Rice, Tr.'s Meyers 1, nw se nw 15-22n-7e, core 3001 ft.

NATCHITOCHES PARISH—Clyde Creighton's Friedman Est. 1, swc 52-7n-6w, co to make ds test, td 2947 ft. Edwards & Turner's Prudential Life Ins. Co. 1, nw nw 26-10n-6w, dk. Mike Kissick's Raines 1, 28-9n-10w, dr 3465 ft (corrected depth). Leslie Prod. Co.'s Tom Moffitt 1, se nw 19-10n-10w, lcn. Missouri Drlg. Co.'s Brown Lbr. Co. 1, 5-10n-10w, sd 1033 ft. B. E. Taylor's De Blieux 1, nwc 83-10n-7w, rur.

RED RIVER PARISH—Sterling O&G Co.'s Long-Bell Lbr. Co. 1, se ne se 19-13n-9w, sd 2930 ft.

SABINE PARISH—M. T. Hines' J. B. Hill 1, sw ne 4-6n-11w, arr set csg, td 2278 ft. Laurel Pet. Co.'s Long-Bell Lbr. Co. 1, sw sw 14-8n-14w, top Zwolle marl 1763 ft, 7-in csg 1791 ft, dr 1800 ft.

UNION PARISH — Crescent Drlg. Co.'s Woolie 1, ne ne 34-19n-1e, rur. Southern Prod. Co.'s W. E. Clark 1, se nw nw 17-23n-1e, spd 10-in csg 40 ft.

WEBSTER PARISH—Virgil Likens' E. L. Stewart 1, nw nw 25-18n-10w, top Arkadelphia 1376 ft, top Nacatosh 2017 ft, sdtr junk, td 2020 ft.

ARKANSAS

ARKANSAS COUNTY — Grand Prairie Realty Co.'s Fischer 2, ne nw nw 6-6s-4w, rur.

ASHLEY COUNTY—Glen E. McFadin et al's Bovine Farms 1, ne ne 1-18n-8w, elev 178 ft, Nacatosh sand 2767-80 ft, sd for fsg tools, td 2798 ft.

CALHOUN COUNTY — The Hunter Co.'s Stout Lbr. Co. 1, nw ne 33-16-13, ru and sd due high water.

COLUMBIA COUNTY — Southern States Gas Co.'s Pine Woods Lbr. Co. 1, sw ne nw 10-20-22, sd 950 ft.

GRANT COUNTY—Neill & Winters' R. W. Cooper 1, sw se 26-6s-15w, dr 1850 ft.

HEMPSTEAD COUNTY—F. W. Martin et al's A. J. Lafferty 2, se nw 17-14-24, dk.

LA FAYETTE COUNTY—W. H. Harvey's R. F. Allen 1, ne se sw 13-19-25, dk. S. H. Riggs et al's DuBose 1, se sw nw 35-15-24, dr 2670 ft. Transportation Pet. Co.'s Cochran 1, ne se 25-19-25, lcn. Red River Lbr. Co. 1, sw sw 26-19-25, elev 250 ft, top Nacatosh 1804 ft, top Blossom 2740 ft, dr 3453 ft.

MILLER COUNTY—C. J. Hodges et al's Commercial Nat. Bank 1, sw ne se 30-17-28, dk. King Oil Corp.'s E. G. Anderson 1, nw sw ne 16-14-27, dr 2470 ft. Lee Timberlake et al's Frost Lbr. Co. 1, sw sw se 27-15-26, sd 3097 ft.

NEVADA COUNTY—Carnett et al's Floyd Munn 1, 16-14-22, sd 50 ft.

OUACHITA COUNTY — Snow-Black Pet. Co.'s O. F. Wyman 1, n½ sw 36-11-16, spd 10-in csg 100 ft. Steele et al's Myar Est. 1, 16-13-18, 10-in csg 100 ft, dr 1310 ft.

SEVIER COUNTY—Pendleton & Vaughan's Fee 1, nw se 35-9s-30w, spd dr 55 ft. Harris Est. 1, 34-9s-30w, arr shoot 8-in csg at 1137 ft, td 1320 ft.

UNION COUNTY—Gulf Ref. Co.'s Werner Lbr. Co. 49, sw nw sw 5-16-16, 10-in csg 2293 ft, dr 6318 ft, red shale and lime. H. L. Hunt, Inc.'s E. F. Gregory 15, se se 10-17-14, elev 180.4 ft, 7-in csg 5834 ft, top Permian 6816 ft, set 5-in OD csg 6450 ft, tested 3000 bbls sw, pb to 3478 ft and will perf about 3478 ft, old td 6911 ft, Permian salt. Mrs. R. K. Jones' J. Davis 1, nw nw 28-16-14, 6⅝ csg 2746 ft, core 3130 ft. Joe Modisette et al's D. G. Sturdivant 1, se se 6-18-13, sd 4016 ft, sandy shale. E. O. Olds' Telford 1, nw nw 35-17-15, wosr, td 2211 ft.

MISSISSIPPI

BOLIVAR COUNTY—White & Jones' Ballou 1, sw ne ne 18-24n-7w, 10-in csg 200 ft, sd 550 ft.

CLARKE COUNTY—L. Beckwith et al's Long-Bell 1, sw se 10-2n-16e, ru and sd.

MADISON COUNTY—Cleve Love et al's P. F. Simpson 1, nw nw 30-8n-1w, lcn.

MONROE COUNTY — P. J. McAlpine et al's Crook 1, ne ne 4-13s-18w, arr test sg, td 2502 ft.

STONE COUNTY—Gulf Ref. Co.'s Dantzler Lbr. Co. 7, se se 36-3s-11w, dr 6714 ft.

WARREN COUNTY—Harry W. Elliott's R. L. Parker 2, nw nw 14-14n-1e, sd high water, td 1602 ft.

WASHINGTON COUNTY — Mid-Continent Developments' Lee 1, 33-15n-8w, elev 124 ft. dr 1861 ft hd rock.

WINSTON COUNTY—Jack Vale's Moody 1, sw nw sw 3-13n-14e, elev 540 ft, claim sg, arr make test, td 1338 ft.

ALABAMA

BALDWIN COUNTY—Mrs. Mamie McCurry et al's Southern Kraft Co. 1, nw ne sw 28-2s-4e, lcn.

COVINGTON COUNTY—Geometer Prod. Co.'s A. B. Culbreth 1, sw sw ne 8-2n-14e, sd 5600 ft, repr rig.

HOUSTON COUNTY — Rice O&G Co.'s Oakley Est. 1, sw ne sw 9-3n-29e, sd 2770 ft, rock.

LAMAR COUNTY — DeSoto O&G Co.'s Gardner 1, nw nw 22-15s-16w, elev 503 ft, dr 4294 ft.

FLORIDA

HILLSBOROUGH COUNTY — Southern Pet. Co.'s Mizzell & Williams 1, 4-32s-25e, elev 120 ft, co td 2100 ft.

LAKE COUNTY—Oil Dev. Co. of Fla.'s Gulf Expl. Co. 1, se se 17-24s-25e, re-landing 12-in csg at 435 ft.

Hardware

Bering-Cortes Hardware Company, Houston, Texas, is distributing its 1935 catalog. A feature of this book is an up-to-date list of freight classifications and freight rates for cities within a radius of 358 miles from Houston.

Scale and Corrosion Elimination

Descriptive literature of Sand-Banum Blue Seal Emulsion—for the removal and prevention of scale and corrosion from water cooling systems—is available to interested parties from the American Sand-Banum Company, 342 Madison Avenue, New York City. This is a pure vegetable compound and is guaranteed absolutely harmless to all equipment. It holds water impurities in "colloidal suspension" and thus prevents the formation of scale and corrosion.

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See
Important Announcement
Page 35

NEWS *from the* *Industry's* EQUIPMENT MAKERS

M. A. RUTIS

Cameron-Rector Have Representative at Tulsa

Cameron Iron Works, Houston, and Rector Well Equipment Company, Fort Worth, jointly announce the appointment of M. A. Rutis as Oklahoma-Kansas district representative. The district office has been established at 310 Thompson Building, Tulsa. Rutis has been associated with the operating end of the industry since 1919, in the producing and drilling contracting business in North Texas, with Wichita Falls headquarters.

Hercules Motor Company Moves West Coast Office to Los Angeles

Hercules Motors Corporation has moved its West Coast representative's office from 613 Russ Building, San Francisco, California, to room 523 Transamerica Building, Seventh & Olive Streets, Los Angeles.

Oliver Kelly, who is the direct factory representative for Hercules Motors Corporation on the West Coast, is now located at the latter address, from which point he contacts the various manufacturers and dealers in the Western States.

Harrisburg Pipe Changes Name

The name of Harrisburg Pipe & Pipe Bending Company of Harrisburg, Pennsylvania, has been changed to Harrisburg Steel Corporation, according to an announcement of Wilbert Wear, president and treasurer. The sole purpose in adopting the new corporate title is to make the firm name more accurately represent the operations and products of the company. No changes in corporate set-up, or in personnel at the plant or in the field were made, nor are they contemplated.

Harrisburg Pipe & Pipe Bending Company was started about 40 years ago as a small localized pipe bending shop. The fact that the firm has attained a prominent position in the nation's seamless and forged steel industries, without reorganization or consolidations, is a source of no little pride to the personnel. Other executives of Harrisburg Steel Corporation are N. W. Cassel, vice president and treasurer; H. B. Liggett, general manager.

Walter H. Wiewel Appointed Sales Manager of Jones & Laughlin

Walter H. Wiewel has been appointed manager of sales, tubular products, of Jones & Laughlin Steel Corporation effective June 1, to fill the vacancy recently created by the death of F. D. Grunder, who held that position since 1916.

Mr. Wiewel has, since 1932, been manager of tube sales of Timken Steel and Tube Company of Canton, Ohio. He was first employed in 1910 by Cambria Steel Company in its Cleveland office. In 1914 he became associated with United Steel Company, Canton, Ohio, and in 1918 was appointed assistant general manager of sales of the successor company, United Alloy Steel Corporation.

He was appointed manager of the New York district office of Standard Seamless Tube Company in 1925 and later joined Timken Steel & Tube Company.

Non-Corrosive Products Represented at Houston

Non-Corrosive Products Company of Texas, distributors of Protecta-Kote, a protective coating for pipe lines, tanks, or any other iron or steel product, announces the opening of offices at 2301 Commerce Street, Houston. The company is distributing Protecta-Kote in Texas, Louisiana and Oklahoma fields. The product is manufactured by Non-Corrosive Products Company, in Los Angeles.

Non-Corrosive Products Company of Texas was organized by A. J. "Tony" Mendive and Edward W. Seymour, one of the owners of the manufacturing concern in California. Mendive, heading the activities of the new company, first entered the oil industry in the Ebano field of Mexico, with Huasteca Petroleum Company. In 1920 he entered the pipe line and storage tank contracting business in Tampico.

This gathering is the spring sales meeting of Bridgeport Machine Company at the general offices in Wichita, Kansas. The meeting was held recently and included district managers, store managers and some of the company's salesmen from Oklahoma, Kansas and Texas.

O'Leary Advanced By Lukens Steel

A. J. O'Leary has been appointed assistant to general manager of sales at Lukens Steel Company, Coatesville, Pennsylvania. Prior to joining the Lukens organization in 1916, he was with the Pennsylvania Railroad and Alan Wood Steel Company.

O'Leary spent five years in the mills

A. J. O'LEARY

and mill service departments at Lukens before he was transferred to the sales department, where he served since 1931 until his recent appointment.

Republic Steel Moves Pittsburgh District Offices

Effective May 18, the Philadelphia district sales office of Republic Steel Corporation, and subsidiaries, Berger Manufacturing Company, and Union Drawn Steel Company, was removed from the Fidelity-Philadelphia Trust Building, to the Broad Street Station Building, 1617 Pennsylvania Boulevard, according to an announcement by N. J. Clarke, vice president in charge of sales.

J. B. DeWolf continues in charge of the office as district sales manager, assisted by the present staff.

Maintenance Engineering Opens Assembling Plant

Maintenance Engineering Corporation, Houston, Texas, announces the opening of an assembling plant for Mason-Neilan Regulators, with W. H. Leverett in charge.

Paul Gage and Son Represent Goulds

W. P. Gage & Son, Inc., Dallas, Texas, has been appointed representative of Goulds Pumps, Inc. W. P. (Paul) Gage started in the oil business 30 odd years ago at Beaumont with the Security Oil Company (now Magnolia Petroleum Company). He was later connected in an executive capacity with the Lone Star Gas Company and still later with Pure Oil Company. The son in the firm is W. P. Gage Jr. (Billy), and he has recently returned to Dallas, after six years in sales and engineering with Goulds Pumps, Inc.

Additional Patent Issued National Radiator Corporation

An announcement from the general offices of National Radiator Corporation at Johnstown, Pa., states that a second patent has just been issued on National Oil-Rators, one of the company's recent products.

The National Oil-Rator is an industrial heating unit used primarily by petroleum producers in the dehydration of crude oil emulsions. A prior patent granted to Thomas A. Novotney and Louis N. Hunter, member of the Research Department of National Radiator Corporation, covers the use of this equipment for that purpose.

The latest patent, also granted to Novotney and Hunter, assignors to the company, covers the use of the Oil-Rator for general heating purposes other than the treatment of oil emulsions.

Albert C. Bruce Elected Director Worthington Pump & Machinery

The election of Albert C. Bruce, president of United States Hoffman Machinery Corporation, to the board of directors of Worthington Pump & Machinery Corporation, has been announced.

Mr. Bruce also is a director of the Baltimore National Bank and Central Savings Bank, Baltimore, and likewise a member of the Re-organization Committee of the Symington and Gould Coupler Companies. He brings to Worthington a wide experience in connection with industrial undertakings in various fields, extending over a period of more than 25 years.

Taylor Instrument President Is Making European Business Tour

Herbert J. Winn, president of Taylor Instrument Companies, Rochester, N. Y., sailed from New York, May 15, on the Aquitania, bound for London and a five weeks business trip. A major part of his time while there will be spent at the plant of Short & Mason, Ltd., manufacturing distributors of the Rochester firm in Great Britain.

Oil Well Supply Store At West Branch, Michigan

Oil Well Supply Company recently has opened a branch store at West Branch, Michigan, in charge of J. M. Gibson.

POWER BY "TOLEDO"

The "TOLEDO" Power Drive is primarily devised for operating large "TOLEDO" Geared Threading and Cutting Devices, and when used in this manner it transforms hand tools into fast power equipment.

However the "TOLEDO" Power Drive has many other uses. Operates hand winches, sheet metal rolls, pulls electric cable through conduit, opens and closes large sluice gates and gate valves, and many others.

A "TOLEDO" Power Drive may solve your power problems. A postcard brings complete details.

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Mud Conditioner

GEORGE S. MEPHAM CORPORATION

Geo. S. Mepham Corporaton, East St. Louis, Illinois, has announced full production on "Meptol," an organic compound for reducing the viscosity of drilling mud. The chemical components of the conditioner result in a maximum reduction of mud viscosity with a minimum jel reaction, state the manufacturers.

The Chemical comes to the user in concentrated form to permit easy transportation. As with other chemical compounds for reducing viscosity, various strength solutions are required for treating muds of different compositions.

An average solution for treating formational mud follows:

Water .....50 gallons
Caustic Soda... 3 pounds
Meptol ..... 5 pounds

Other formulae cover a range up to 10 pounds of caustic soda and 10 pounds of Meptol to 50 gallons of water.

Application should be direct to the mud as it comes from the flow line, and the solution should be added in quantities sufficient to empty the drum in 40 minutes to one hour, according to the manufacturers. The chemical is packaged in handy cartons of five pounds, net weight, six cartons to the case.

Welding Machine

THE LINCOLN ELECTRIC COMPANY

The Lincoln Electric Company, Cleveland, Ohio, has announced a new, small, low priced motor generator type of arc welding machine. This machine brings the many advantages of arc welding to automobile repair shops, sheet metal and fabricating shops and others called upon to weld thin gauge materials. Known as the SA-100, this new unit opens up an entirely new field of application for arc welding, since it delivers as low as 30 amperes at the arc without use of auxiliary devices, it is claimed.

The new SA-100 model is of motor drven type, with a current range of 30 to 125 amperes. The generator is of single operator variable voltage type with 100 ampere NEMA rating. Easy welding is assured by patented dual control which provides independent adjustment of open circuit voltage and welding current.

The motor installed is the Lincoln "Linc-Weld" 5 horsepower squirrel cage induction type for across the line starting. The starter switch is of push button type. Wing nut cable terminals permit change of welding current polarity. The new welder is normally 220 or 440 volts and can be furnished for 110 or 550 volts, 3 or 2 phase, 60 and 50 cycles are desired. Connections are available for reconnecting from 220 to 440 volts, or vice versa.

Oil and Gas Leases and Royalties

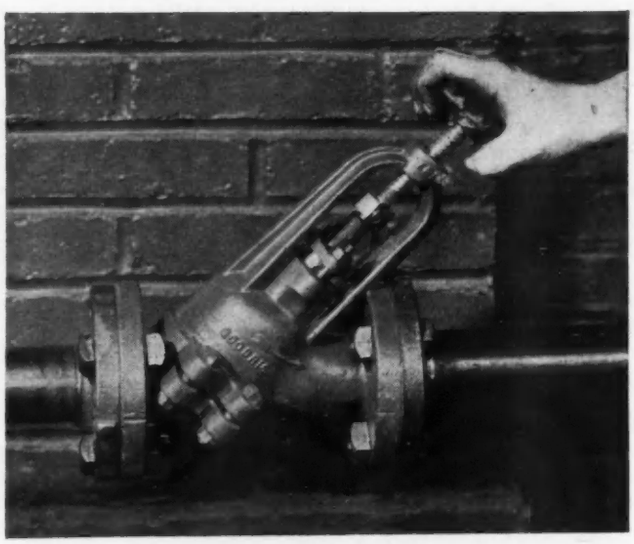
Thomas Law Book Company recently has published a book on "Oil and Gas Leases and Royalties", by Samuel H. Glassmire of the Tulsa, Oklahoma bar. The book, a substantially bound volume of 400 pages, is a practical legal treatise on petroleum rights accruing by virtue of mineral deeds and oil and gas leases. The author wrote a treatise some time ago on "Oil and Gas Royalties", and has enlarged upon the subject matter in the more recent volume. The book may be secured through Gulf Publishing Company, Box 2811, Houston, Texas. The price is $7.50, postpaid.

Valve

THE B. F. GOODRICH COMPANY

The B. F. Goodrich Company, Akron, Ohio, has developed a rubber-lined valve of simple, rugged design and reasonable cost, suitable for handling corrosive and abrasive fluids under conditions of fairly high pressure, pulsating pressure, throttling or suction. The new valve, known as the "Vulcalock" design, may be lined with a number of the company's "Acidseal" compounds, hard or soft, depending upon conditions of service.

The action of the new valve does not depend upon a flexible diaphragm. The resilient, rounded disc which snaps over a circular plate at lower end of stem provides an absolute seal when brought into contact with the moulded rubber-covered seat rings. Both disc and seat rings are simple and easily replaceable parts. The flow is in a nearly straight line. On sizes up to and including the six-inch, there is no restriction of flow through the seat ring, the manufacturer claims.



Goodrich Rubber-Lined Valve

Squeaks *from the* BULL WHEEL

"Your husband is in no great danger, Mrs. Murphy, but I'm afraid I'll have to anesthetize him."

"Well, if you must you must, but dear Mike did so want to have a boy."

"I wonder what I'll have to do for this dress," said the chorine, examining an old garment.

"My Lord!" returned the girl friend, "ain't you done it yet?"

"The best thing you can do is give up cigarettes, liquor and women."

"What's the next best thing?"

"Young lady, what do you usually get for teaching a young man like me some new dance steps?"

"One of my assistants."

"Darling, am I the first man you ever loved?"

"Yes, Jack, all the others were college boys."

"Do you like short skirts?"

"Naw, they get lip-stick on my shirt when I dance with them."

The farmer's wife was spending a day in bed with a severe cough, and her husband was working in the back yard, hammering nails into some boards.

"How's the wife?" asked a caller.

"Not very well," said the farmer.

"Is that her coughin'?"

"No, you fathead," replied the farmer, "It's a hen house."

"I see in the papers that a guy ate six dozen pancakes."

"Oh, how waffle!"

Story heard on the radio, about the merchant-farmer-oil operator, made rich and busy by the East Texas oil field:

Rushing up to the railroad ticket agent's window, and drawing forth several bills, he said: "I want a ticket, quick!"

"Where to?" the agent inquired.

"Anywhere," was the startling reply. "I've got business all over."

"Did you know the defendant, Pearson?" the witness was asked.

"I had a logical acquaintance," the negro replied.

"What do you mean by logical acquaintance?"

"Well," the witness replied, "we both belong to the same lodge."

The stout old lady struggled valiantly to mount the high step of the waiting omnibus.

"Come along, ma," urged the conductor; "if they'd given you more yeast when you was a gal you'd be able to rise better."

"Yes, young man," she retorted, as at last she hoisted herself triumphantly. "And if they'd given you a bit more yeast you'd be better bred."

Omar Khayyam's 1935 Version

A loaf of bread (sliced),
A jug of wine (3.2)
And thou—
Beneath a tree set out by
The CCC.

—*Vic Boellner, El Dorado (Kan.) Times.*

"Check the oil, sir?"

"Naw, it's O.K."

"Got enough water in the radiator?"

"Yep, filled up."

"Anything else, sir?"

"Yes, would you please stick out your tongue so I can seal this letter?"

A backwoods mountaineer one day found a mirror which a tourist had lost. "Well, if it ain't my old dad," he said as he looked in the mirror. "I never knew he had his pitcher took." He took the mirror home, stole into his house and hid it in the attic, but his actions did not escape his suspicious wife. That night while he slept she slipped up to the attic and found the mirror.

"Mm-m," she said, looking into it, "so that's the old hag he's been chasin'!"

The demure young bride, a trifle pale, her lips set in a tremulous smile, slowly stepped down the long church aisle, clinging to the arm of her father.

As she reached the low platform before the altar, her slippered foot brushed a potted flower, upsetting it. She looked at the spilled dirt gravely, and then raised her child-like eyes to the sedate face of the old minister.

"That's a hell of a place to put a lily," she said.

Servant: The doctor's here, sir.

Absent-minded man: I can't see him. Tell him I'm ill.

"If you won't pay for your milk you might at least return the empty bottles."

"What do you pay for empty bottles?"

CHAIN LETTERS remind us . . .

. . . that we set up an endless chain more than twenty-five years ago with a field shop down in Louisiana. Shoe-string capital and the (then) honorable profit motive made us do good work and sell good stuff. Our first customer told a friend. They both told other friends. Sometimes we used a little advertising to tell the world. It's been interesting and profitable to everyone concerned, and no one was left holding the bag or ever will be. When the world goes back to work after the chain letter epidemic, sound old business principles may seem refreshing. Come around and recuperate.

PELCO

PELICAN WELL TOOL & SUPPLY COMPANY

. . . . SHREVEPORT, LOUISIANA

Lake Charles—Houma—Converse
Many—Monroe—Kilgore
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INDEX TO ADVERTISERS

Allis-Chalmers Manufacturing Co. .....
Alten's Foundry & Machine Co. .....
American Askania Corporation .....
American Association of Petroleum Geologists .....
American Cable Co. 34
American Iron & Machine Works .....Back Cover
American Lubricator Co. .....
American Meter Co. .....
American Petroleum Institute .....
American Roller Bearing Co. .....
American Sand-Banum Co. .....
American Steel & Wire Co. .....
Alexander Anderson, Inc. .....
Apex Construction Co. .....
B. K. Appleman .....
Armstrong Brothers Tool Co. .....
Ash Grove Lime & Portland Cement Co. ..
Atlas Powder Co. .....
Authorized Appleman Bit Service .....
Axelson Manufacturing Co. .....

Baash-Ross Tool Co. 6
Baldwin-Duckworth Chain Corp. .....
Baker Oil Tools, Inc. 3
Baroid Sales Co. .....
The Barrett Co. .....
William M. Barret, Inc. .....
Black, Sivalls & Bryson .....
Blackstone Hotel .....
Bowen Air Lines .....
Bradford Motor Works .....
Branch-Krachy Co. .....
Brauer Machine & Supply Co. .....
The Brewster Co. .....
Bridgeport Machine Co. 14
Broderick & Bascom Rope Co. .....
Browning-Ferris Machinery Co. .....
The Buda Co. .....
E. D. Bullard Co. .....
Burlington-Rock Island Railroad .....
Butler Manufacturing Co. .....
Byron Jackson Co. .....

Cameron Iron Works .....
The Cavins Company .....
Hotel Cecil .....
Central Exploration Co. .....
Chain Belt Co. .....
Chemical Process Corp. .....
Clark Brothers Co. .....
Cleveland Hardware & Forging Co. .....
Climax Engineering Co. .....
Colmonoy Metallic Crystal Co. .....
Columbian Steel Tank Co. .....
Continental National Bank .....
The Continental Supply Co. 23
Fred E. Cooper Co. .....
Cooper-Bessemer Corp. .....
The Corbett Corp. .....
Cotton Exchange and Board of Trade Building .....
Crescent Tool Co. .....
W. H. Curtin Co. 57

Darling Valve & Manufacturing Co. .....
Dayton Rubber Manufacturing Co. .....
Dearborn Chemical Co. .....
Diamond Metal Co. .....
Dowell, Inc. .....

Eastman Oil Well Survey Co. .....
Geo. H. Echols .....
Economy Electric Lantern Co. .....
E. H. Edwards Co. .....Second Cover
Elliott Core Drilling Co. .....
Emsco Derrick & Equipment Co. .....
Esmco Screen Co. .....
Ethridge Process Corp. .....
Exner-Dodge Packer Co. .....

Geo. E. Failing Supply Co. 65
First National Bank, Tulsa .....
C. A. Fischer Co. .....
The Edwin H. Fitler Co. .....
Foote Bros. Gear & Machine Co. 61
Ford Motor Co. .....
Fort Worth Laboratories 77
Fredell Construction Co. .....
Frick-Reid Supply Corp. .....

Gardner-Denver Co. .....
The Garlock Packing Co. .....
Gas Lift Sales Co. .....
Gas Power, Inc. .....
Gaso Pump & Burner Manufacturing Co. ..
Gearench Manufacturing Co. .....
General Electric Co. .....
L. H. Gilmer Co. .....
Globe Oil Tools Co. .....
B. F. Goodrich Rubber Co. 16-17
Goodyear Tire & Rubber Co. .....
H. P. Gott Manufacturing Co. .....
Gray Kerotest 21
Gray Tool Co. 67
The Guiberson Corp. .....
Gulf Publishing Co. .....35 and 66
Gulf States Utilities Co. .....

Hall & Lowrey, Inc. .....
Halliburton Oil Well Cementing Co. 13
Hamilton Brothers 73
Hardway & Cathey 77
Haynes Stellite Co. .....
Hazard Wire Rope Co. .....
C. M. Heeter Sons Co. 60
Hercules Motors Corp. .....
Hercules Tool Co. .....
Hewitt Rubber Corp. .....
Hirsch, Susman & Westheimer 77
Houston Oil Field Material Co. .....
Houston Ready-Cut House Co. .....
Hughes Tool Co. .....First Cover
Humble Oil & Refining Co. .....
Hyatt Roller Bearing Co. 29
Hydril Co. .....

Independent Exploration Co. 77
Independent Pipe & Supply Co. .....
Ingersoll-Rand Co. .....
International Cement Corp. .....
International Derrick & Equipment Co. ...
International Harvester Co. .....
International Nickel Co. .....

Byron Jackson Co. .....
Jarecki Manufacturing Co. .....
The Jeffrey Manufacturing Co. 30
Jensen Brothers Manufacturing Co. .....
The Johnson-March Corp. .....
Johnston Formation Testing Corp. .....
S. M. Jones Co. 4
Jones & Laughlin Steel Corp. .....

J. A. Kammerdiner Rotary Jar Co. .....
Kerotest Manufacturing Co. 38
Keystone Pipe & Supply Co. .....
Kibele Manufacturing Co. .....
Kinzbach Tool Co. .....
Kobe, Inc. .....

Landis Machine Co. .....
Larkin Packer Co. .....
The Lane Wells Co. .....
Layne & Bowler Co. .....
A. Leschen & Sons Rope Co. .....
The Lincoln Electric Co. .....
Link Belt Co. .....
Ludlow Valve Manufacturing Co. .....
Lufkin Foundry & Machine Co. .....

M. & V. Tank Co. 26
MacClatchie Manufacturing Co. .....
D. S. Mair Machinery Corp. .....
Maloney Tank Manufacturing Co. .....
Martin-Decker Corp. .....
F. G. Masquelette & Co. .....
Fred W. Matthews 64
J. H. McEvoy & Co. .....
McIntosh & Seymour Corp. .....
Mengden & Sons Co. .....
Geo. S. Mepham Co. .....
Merchants Photo Service .....
Merco Nordstrom Valve Co. .....
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Miller Sand Pump Co. .....
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Lee C. Moore & Co. .....
Muskogee Iron Works .....

The National Supply Co. .....
National Tank Co. .....
National Tube Co. .....
The New Deal Specialty Co. .....
Non-Corrosive Products Co. .....
Norvell-Wilder Supply Co. 25

Oil Center Tool Co. .....
Oil City Brass Works .....
Oil Well Supply Co. .....
Oklahoma Gas & Electric Co. .....
Osage Metal Co. .....
Oster-Williams .....

Pangborn Corp. .....
The Parkersburg Rig & Reel Co. 26
Patterson-Ballagh Corp. .....
Pelican Well Tool & Supply Co. 81
Petroleum Electric Power Club .....
Petroleum Iron Works .....
Petroleum Rectifying Co. .....
Piccadilly Hotel .....
Pittsburgh Equitable Meter Co. .....
Pittsburgh Steel Co. .....Third Cover
Portable Rig Co. .....

Raybestos-Manhattan, Inc. .....
Reading Iron Co. 73
Rector Well Equipment Co. 58
Red Rex Corp. .....
Reed Roller Bit Co. 18
Regan Forge & Engineering Co. .....
The Republic Rubber Co. .....
Republic Portland Cement Co. .....
The Republic Steel Corp. .....
The Ridge Tool Co. .....
Dewey T. Ross, Inc. .....

Schlumberger Well Surveying Corp. .....
Seismograph Service, Inc. .....
Seismos .....
J. E. Shaffer Co. .....
Shand & Jurs Co. .....
Shell 36
SKF Industries, Inc. .....
Sonken-Galamba Corp. 72
South Chester Tube Co. .....
Southern Pacific Lines .....
Southern States Co. .....
Southwestern Machine & Supply Co. .....
E. M. Smith Co. .....
Howard Smith Co. .....
Sperry-Sun Well Surveying Co. .....
Star Drilling Machine Company .....
Mitchell Stewart Corp. .....
Stone Oil Tool Co. 77

Templeton, Kenly & Co. 77
Texas Iron Works .....
Texas Rubber & Specialty Corp. .....
Thermoid Rubber Co. .....
Tnemec Co. .....
The Toledo Pipe Threading Machine Co. 79
Tretolite Co. .....
Trimont Manufacturing Co. .....
Tulsa Chamber of Commerce .....

Union Carbide & Carbon Corp. .....
Union Wire Rope Co. .....
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United States Rubber Products, Inc. .....

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Vortox Manufacturing Co. .....

Waukesha Motor Co. .....
Western Perforating Co. .....
Westinghouse Electric Manufacturing Co. ..
Whitney Manufacturing Co. .....
Wickwire-Spencer Steel Co. 33
Williams Brothers, Inc. .....
C. K. Williams & Co. .....
J. H. Williams & Co. .....
Williamsport Wire Rope Co. .....
Wilson-Snyder Manufacturing Co. .....
Wilson Supply Co. 59
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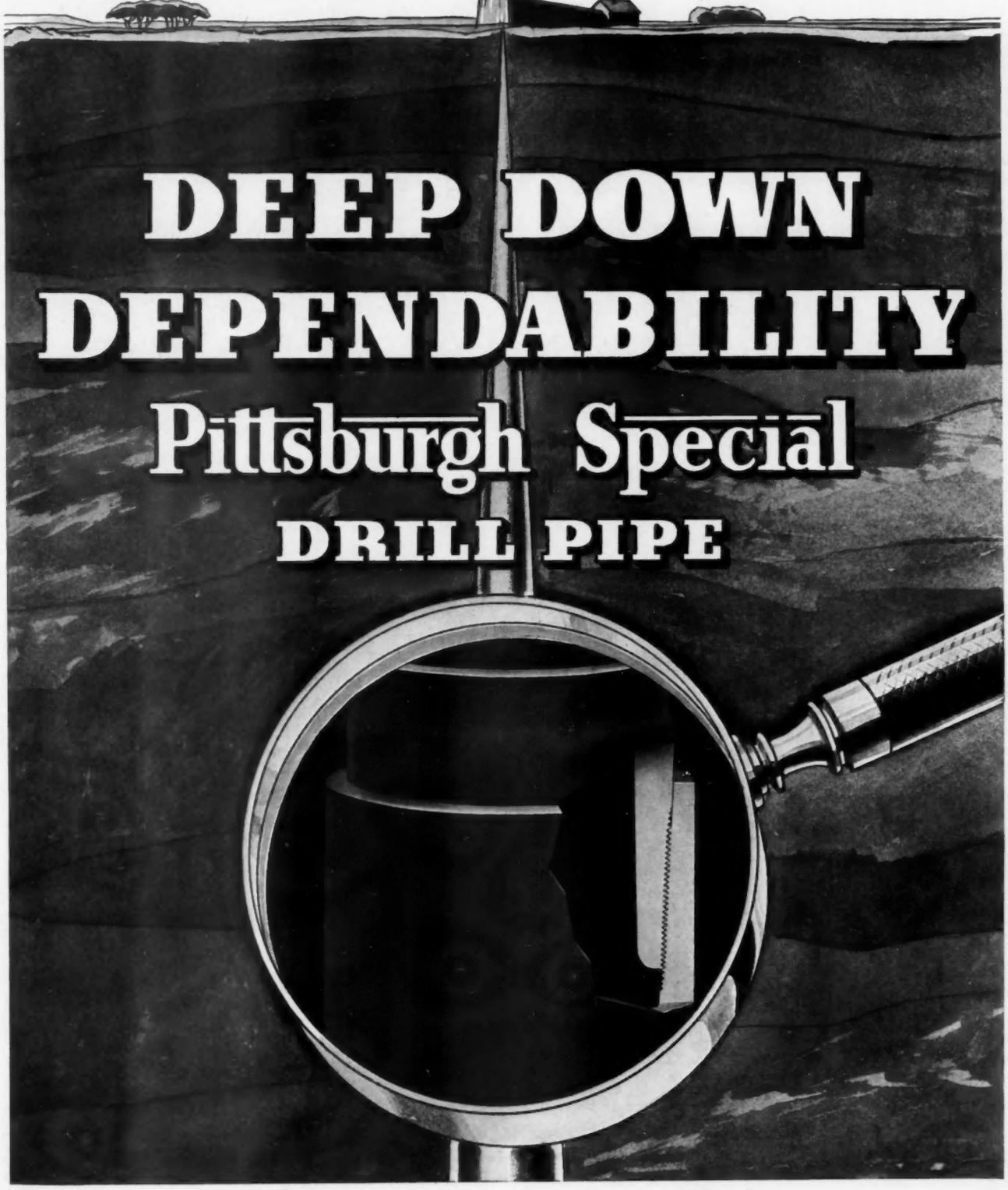

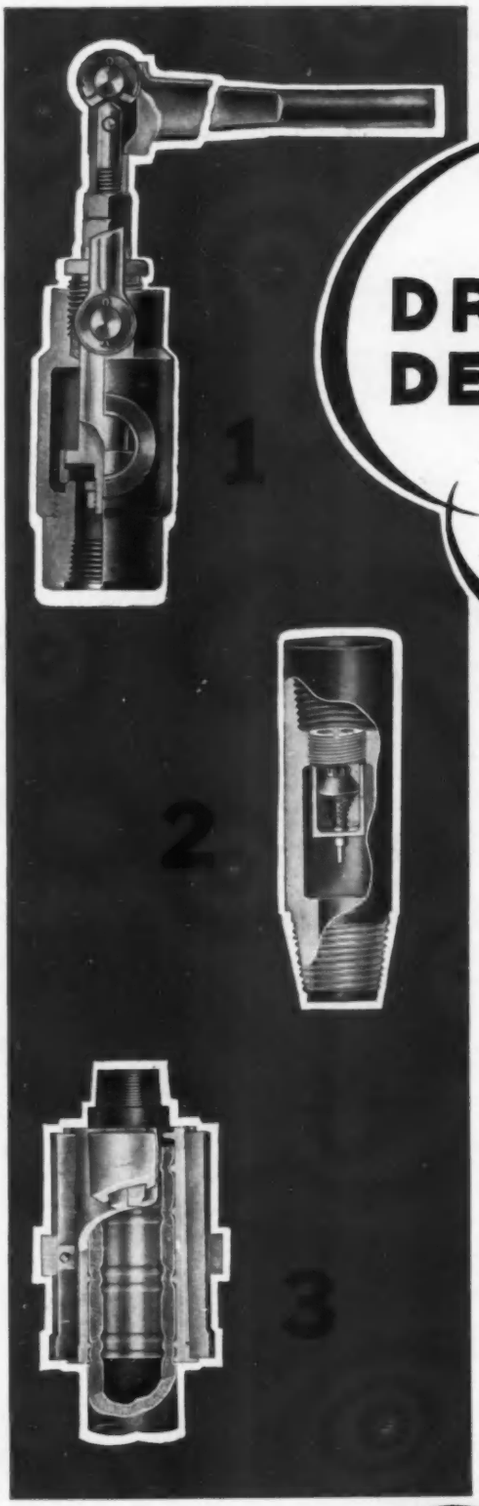

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